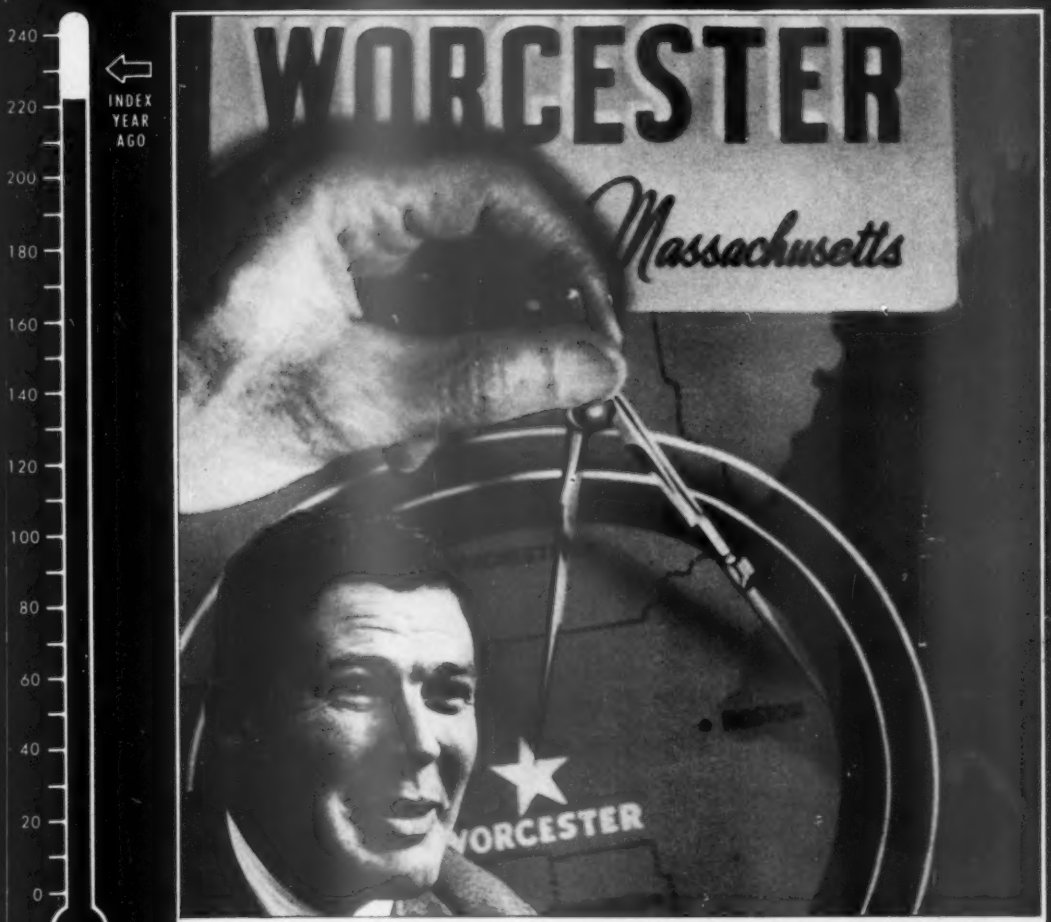
BUSINESS WEEK

THE SHOTGUN WEDDING OF
Movies and TV
PAGE 46



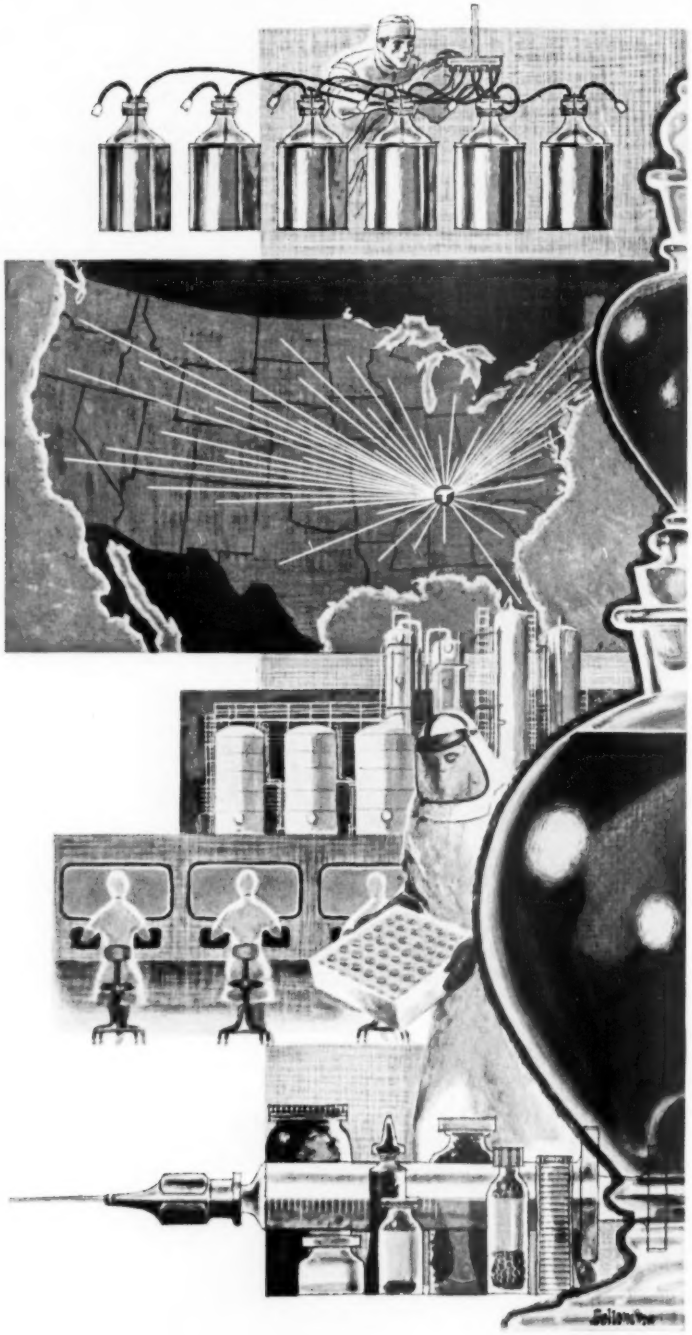
Milton Higgins of Norton: In New England, home has advantages (page 128)

A McGRAW-HILL PUBLICATION

AUG. 9, 1952

TWENTY-FIVE CENTS

THERE'S A TOUCH OF TENNESSEE IN JERSEY PHARMACEUTICALS



Many of the new "miracle" drugs are made in New Jersey, a state widely known for its variety of manufacturing industries. Antibiotics are saving lives every day and Tennessee Products is proud to be furnishing aromatic chemicals that are used in manufacturing these drugs.

TENNESSEE also ships other chemicals to New Jersey manufacturers for many uses . . . Sodium Benzoate as a preservative, Benzaldehyde for flavorings and dyes, Acetic Acid for ester solvents and Benzoic Acid for alkyd resins. And in every state in the union you'll find TENNESSEE at work. That's why TENNESSEE is known from Coast to Coast as an industry serving all industry.

TENNESSEE
PRODUCTS & CHEMICAL
Corporation
NASHVILLE, TENNESSEE

Producers of: FUELS • METALLURGICAL PRODUCTS • TENSULATE BUILDING PRODUCTS • AROMATIC CHEMICALS WOOD CHEMICALS • AGRICULTURAL CHEMICALS

RESEARCH KEEPS **B.F.Goodrich** FIRST IN RUBBER

Photo courtesy United Engineering & Foundry Co., New Castle, Pa.

Sizzling sand poured on rubber

A typical example of B.F.Goodrich improvement in rubber

STEAMING hot sand, from molds used to make steel castings, is dumped on this belt every few minutes.

Ordinary belts stood the sizzling sand for only 30 days. A belt made of woven asbestos lived a short, simmering life of 60 days. But even during this brief life, the belt had to have "first aid" every week — a dressing to protect it from the heat.

The company was far from satisfied. They asked about rubber, but every salesman said it couldn't stand the terrific heat. Every salesman, that is, but one.

A B.F.Goodrich man told them that his company had developed a special heat-resisting rubber for belts carrying such things as hot sand, lime, nitrates. Instead of ordinary fabric, they used *glass* fabric to make a belt that can stand heat as high as 500° F. Put to work here, the BFG belt outlasted all previous belts. It performed for two years — a ripe old age for a belt in a busy foundry that works 24 hours a day, 7 days a week.

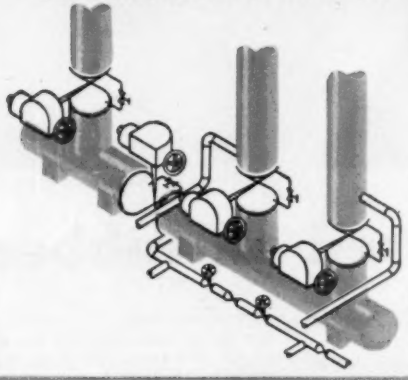
New and improved products, like this hot material belt, are the result of the B.F.Goodrich emphasis on research — finding better and more economical ways of getting things done with industrial rubber products. That's why it pays to keep in touch with your BFG distributor for the latest ways to save with rubber. *The B.F.Goodrich Company, Industrial & General Products Division, Akron, Ohio.*

B.F.Goodrich
RUBBER FOR INDUSTRY

This CRANE VALVE cut the cost of handling steam

Here was a side-by-side comparison between valves of conventional design and Crane Pressure-Seal Bonnet Valves. The high-pressure steam service was identical. The conventional valves gave repeated trouble. Crane gate valves to this day are giving complete satisfaction. You can always buy with greater confidence when you select from the complete Crane line.

Read these Facts of the Case!



Where Installed: Controlling steam direct from boilers operating at 825 pounds pressure, 825 degrees F., in utility power station. Bolted bonnet valves on first units; Crane Pressure-Seal valves on latest addition.

Trouble with Bolted-Bonnet Valves: Records for these valves show repeated repairs for seat leakage and difficulty in keeping bonnet joints tight, almost from start. Also trouble with disc sticking shut.

Performance of Crane Pressure-Seal Bonnet Valves: Giving continuous, completely satisfactory service since installed 4 years ago. Seats and bonnet joints alike remain leak-free, tight as new. Operation remains smooth and positive.

More CRANE VALVES are used than any other make

CRANE CO., General Offices: 836 S. Michigan Ave., Chicago • Branches and Wholesalers Serving All Industrial Areas

VALVES • FITTINGS • PIPE • PLUMBING • HEATING

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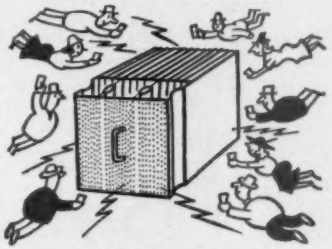
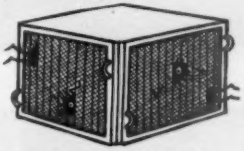
AIR-MAZING FACTS

BY O. SOGLOW

WATCH MY DUST! A lump of charcoal the size of a pack of cigarettes has an area of about 22 square inches. But when you crush it to fine dust, its total area is increased to the size of a city block.



GETS BUSINESS ELECTRONICALLY! Leading businessmen know that super-clean air means more business for stores, restaurants, offices and other commercial establishments. Electromaze electrostatic air filters provide super-clean air—remove dust, dirt, smoke and pollen. Filter cells slide out like file drawers for easy servicing. "Building block" construction cuts installation time, reduces cost.



DOGHOUSE FOR DUST! Air-Maze DH ("dog house") filter assemblies on intake pipes protect engines against sucking in dust and dirt. All-metal construction. Filter cells can be removed quickly for servicing. Available for indoor or outdoor applications.

WHETHER YOU BUILD OR USE engines, compressors, air conditioning and ventilating equipment, or *any device using air or liquids* — the chances are there is an Air-Maze filter *engineered* to serve you better. Representatives in all principal cities, or write Air-Maze Corporation, Cleveland 5, Ohio.

AIR-MAZE
The Filter Engineers

AIR FILTERS
SILENCERS
SPARK ARRESTERS
LIQUID FILTERS
OIL SEPARATORS
GREASE FILTERS

107 RADIO-RELAY TOWERS beam the voice signals through these lens-type antennas. Strengthening and retransmitting these signals is a system of batteries, rectifiers, generators and microwave amplifying equipment connected by electric wires and cables. The Anaconda Wire & Cable Company is one of the nation's foremost producers of all types of electrical conductor, from heaviest power cables to hair-thin magnet wire.

"ANACONDA" IS A REGISTERED TRADEMARK 52306A

THEY ARE JOYFUL VOICES . . . anxious voices. They are warm and friendly . . . cool and impersonal. They are demanding . . . they are pleading . . .

And they are overhead.

They are journeying through space on an invisible, narrow radio beam that is focussed like a searchlight and aimed from point to point across the country. For these voices are speaking on the telephone in absolute privacy on the Bell System's new Microwave Radio-Relay.

Right now, some are passing through the microwave tower at Pratt's Pass, just east of Salt Lake. A hundred-thousandth of a second ago they were over the skyline of New York . . . and others were winging down from Mt. Rose, in the Sierra Nevadas. And before they complete this split-second journey, they will have crossed the country along a skyway route of 107 relay points.

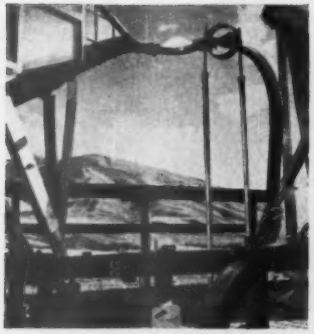
Here is a triumph of communications . . . handling hundreds of telephone conversations at one time . . . transmitting network television shows from coast to coast. And it is made possible by metals . . . by copper in the tubular wave guides and in the maze of parts and wiring which are the close-knit nerves and muscles of transmitters, receivers and power generators. And it is made possible, too, by lead in the storage batteries, silver in the hundreds of contact points, and selenium in the rectifiers.

These are metals and metal products such as are flowing in ever increasing quantities from Anaconda's mines and mills. Anaconda's program of research and expansion, including the development of new sources of metals and improved production techniques, is keeping pace with industry, science and defense.

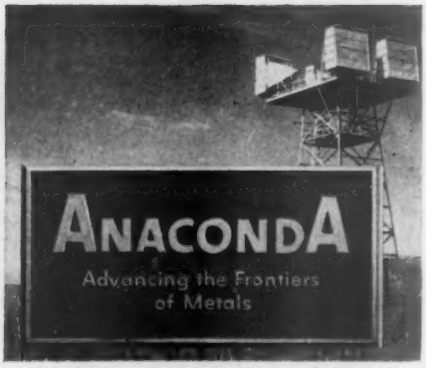
This program will help blaze new pathways for all communication . . . so that the air will ever be alive with the ideas and information that bring understanding and strength to free peoples.

ARE SPEAKING

SELENIUM, AN ANACONDA METAL, converts alternating current to direct current to power this transmitter. Electric power—so wholly dependent on metals—is the greatest source of America's production strength. Today, private electric utility companies are sponsoring a *Production For Freedom* celebration, emphasizing electric power's contribution to the production of goods for peace and defense.



COPPER WAVE GUIDES—the curved rectangular tubes carry the high-frequency radio waves between these antennas on the roof and the transmitting and receiving equipment located in the relay tower below. The American Brass Company is the Anaconda subsidiary which every year manufactures hundreds of millions of pounds of rustproof, corrosion-resistant copper and copper alloys in all the forms industry finds so useful.



PRODUCERS OF: Copper, zinc, lead, silver, gold, platinum, cadmium, vanadium, selenium, superphosphate, manganese ore, ferromanganese.

MANUFACTURERS OF: Electrical wires and cables, copper, brass, bronze and other copper alloys in such forms as sheet, plate, tube, pipe, rod, wire, forgings, stampings, extrusions, flexible metal hose and tubing.

1 ***In one*** of Colgate-Palmolive-Peet's N. J. laboratories, Mr. Little (right) and Dr. Emil E. Dreger, research and development vice president, inspect research projects that will mean still easier housework tomorrow. Strangely enough, the WYANDOTTE SODA ASH used in C.P.P. soap products is also a vital ingredient in laboratory glassware! Rubber tires, shoes, and sponge rubber; textiles, paint, drugs, and cosmetics are manufactured with still other WYANDOTTE CHEMICALS.

2 ***Such familiar*** products as Palmolive Soap, Cashmere Bouquet, Fab, Vel, Ajax, Super Suds are all wrapped or packaged automatically, in fantastic quantities! WYANDOTTE products are used in making the cardboard and paper for packaging — even help make plastic container tops.

3 ***Colgate-Palmolive-Peet's*** hard-working Fab, Vel, or Super Suds works wonders in the dishpan — is kind to hands! WYANDOTTE works elsewhere in your kitchen, too: in the porcelain on your sink; in tumblers and window glass; in food — baked goods and dairy products, for example.

4 ***Here you*** see Colgate-Palmolive-Peet's Lustre-Creme Shampoo being put into the jars you'll see on your druggist's shelf. Like cardboard packages and paper bags, jars are also made with uniform, high-quality WYANDOTTE CHEMICALS. That goes, too, for paper labels . . . printing inks!

In the story of

Colgate-Palmolive-Peet quality, there's a chapter on Wyandotte!

C. P. P. President E. H. Little goes all-out for quality and uniformity. Wyandotte Chemicals play an important part!

50,000,000 women rely on Colgate-Palmolive-Peet for complexion care, laundering ease, dishwashing efficiency. And *indirectly*, as Mr. Little knows, they *also* rely on Wyandotte Chemicals—in C.P.P. soaps; in food, textiles, pharmaceuticals.

Colgate-Palmolive-Peet products, to hold their vast and varied markets, must be absolutely pure and uniform. Chemicals used in them must be *and are* the finest obtainable. For nearly a quarter of a century, two of those chemicals have been Wyandotte *Soda Ash* and *Caustic Soda.*

In one way or another, every industry depends on reliable, quality chemicals. For over 62 years Wyandotte has been a leading source for basic and organic chemicals and specialized cleaning products . . . plus the finest technical service. Call on us! *Wyandotte Chemicals Corporation, Wyandotte, Michigan. Offices in Principal Cities.*

Wyandotte CHEMICALS

REG. U. S. PAT. OFF.

Organics, Inorganics — World's largest manufacturers of specialized cleaning products for business and industry

These white **ribbons are soap being milled to blend perfectly — not noodles! ut lots of foods *are* helped by WYANDOTTE HEMICALS . . . in their making, baking, processing. The "rise" in bread is a chemi- l action. So is the "fizz" in headache medies and carbonated beverages.**

6 ***The TERG-O-TOMETER*** **(above) is a lab-type multiple washer that measures the efficiency of several soap and detergent formulations at one time. It's just one of many devices used in the cleaning and chemical industries to assure top-quality products for home, business and industry.**

7 ***Your life,*** **your business, the products *you* manufacture or process are constantly being helped or improved — directly or indirectly — by WYANDOTTE products, research, and process development. Let us help you with your chemical problems relating to supply, application, or production.**

Towmotor stacks bundles of pulp 8-high at Rising Paper Co., Housatonic, Mass.

Just takes a touch —

for one man—*any man*—to put capacity loads anywhere they're wanted with Towmotor. Just the man-hours saved on *any one* handling job soon pay for Towmotor . . . often within a few months. And Towmotor Mass Handling equipment is built to guarantee *continuous* mass savings. For your copy of "Man-Hour Thieves," a guide to greater production efficiency, and name of your nearest Towmotor Representative write Towmotor Corporation, Div. 2, 1226 E. 152nd St., Cleveland 10, Ohio.

TOWMOTOR
THE ONE-MAN-GANG ®

FORK LIFT TRUCKS and TRACTORS
RECEIVING • PROCESSING • STORAGE • DISTRIBUTION

READERS REPORT

Money Troubles?

Dear Sir:

Under Management Briefs [BW—Feb.9'52,p68], there is an article, Donations Guide, stating that businessmen trying to decide where to donate company funds can get a lot of help from Giver's Guide. Now—if anyone of your readers has a money problem such as they don't know what to do with it, maybe I can be of some help. As for myself, I don't have this problem because I don't have any money. If anyone would like to make a donation —such as a car, mink coat, and a few other dire necessities—why, all donations will be gladly accepted.

Very truly yours,
NAME WITHHELD
WEST HARTFORD, CONN.

Manganese

Dear Sir:

I was particularly interested in the article More Domestic Manganese [BW—Jul.19'52,p66]. At the same time I was rather shocked to note that the public is being advised that the "government will buy 19-million long tons of manganese and concentrates in small lots." Out here in Montana we have carefully watched all of the government releases regarding the purchases of manganese ore. . . . There are continual applications for leases by small operators to whom this new program will apply. It is, however, misleading to them to hear about 19-million tons of manganese and concentrates when the government regulation specifically refers to 19-million long dry ton units of manganese. Quantitatively this would be only about 396,000 long tons of ore in the four year period at the specified grade of 48% manganese, or 475,000 long tons if it was all at the minimum acceptable grade of 40%.

Yours truly,
F. A. LINFORTH
ANACONDA COPPER MINING CO.
BUTTE, MONT.

• Reader Linforth is right. This is how it is figured: One long ton unit of manganese is 1% of a long ton. Therefore, 48% ore would contain 48 long ton units per long ton of ore.

Terminology

Dear Sir:

Referring to your article The New Do-It-Yourself Market [BW—Jun.14'52,p61], I note the following terminological discrepancy. See that it doesn't occur in the future. "What's more, ex-veterans of . . ." There is no such

MOVES FRAGILE MOLD SAFELY WITH KELLER HOIST

AN APPLICATION OF KELLER AIR HOISTS

One doesn't take chances with foundry molds—because molding sand will shake down at the slightest provocation and ruin hours of molding time.

But here was a case where a large mold had to be moved, and a Keller Air Hoist came to the rescue.

The instantaneous response of the Hoist gave the workmen accurate control of every movement—to lift and move and set down the mold gently. Thus the mold was moved safely at very slight risk.

The Keller Air Hoist not only handles delicate jobs like this, but tough ones, too. Yet it weighs so little* that a man can easily nestle it under one arm and carry it up a ladder. Another advantage is that air motors don't burn out when they are stalled from overload . . . maintenance costs are unbelievably low.

Many Keller Air Hoists have been in use over periods of years—operating with the same dependability (because engineered with the same skill) as Keller pneumatic drills, grinders, riveters, screw drivers, and nut setters. Available only through Keller sales offices and authorized sales agents.

**1,000-Lb Hoist weighs only 30 lbs*

Air Tools engineered to industry

KELLER TOOL COMPANY, GRAND HAVEN, MICH.

AIR MOTORS • AIR HOISTS • AIR HAMMERS • COMPRESSION RIVETERS • GRINDERS • DRILLS • SCREW DRIVERS • NUT SETTERS

"I got my first break on a mistake!"

"Years ago, I misunderstood a spoken instruction and shipped a rush order to the wrong company. That started me thinking. So I designed a couple of forms to help the shipping department avoid further errors. They worked so well I got my first real recognition. No wonder that in every department I've come up through, I've made sure there were efficient forms to speed work, minimize waste motion!"

IT PAYS TO DO BUSINESS ON HAMMERMILL PAPERS

Your printer can help you design efficient business forms, letterheads and other printing. If he suggests using Hammermill Bond—as thousands of printers do—you may be sure it's the right paper for you. To obtain business printing on Hammermill papers, look for the Guild sign on a printer's window. Let it be your assurance of printing satisfaction. Send for the free sample book of Hammermill Bond.

HAMMERMILL BOND

Hammermill Paper Company, 1455 East Lake Road, Erie 6, Penn.
Please send me the sample book of Hammermill Bond.

Name_____

Position_____

(Please attach to, or write on, your *business* letterhead.) BW-8-9

LOOK FOR THE WATERMARK IT IS HAMMERMILL'S WORD OF HONOR TO THE PUBLIC

thing as an ex-veteran. Once a man has partaken in a war as a member of the Armed Forces and subsequently is discharged from the services he is for the rest of his mortal days a veteran. He can never become an ex-veteran; to use the term ex-veteran is to imply that a man had formerly been a veteran, but is no longer a veteran. The correct terminology is, of course, ex-GI or ex-serviceman.

Very truly,

G. E. HORA
4350 W. 25TH PLACE
CHICAGO, ILL.

Diesels

Dear Sir:

Naturally we read with interest your article Record Racer Shows New Stride to Efficient Small Car Diesel [BW—Jun.14'52,p47]. It is good to see so much space given in a magazine of your stature to any discussion of the advantages offered by diesel engines. We do, however, regret the inference of the title of this article, even though the author apparently went to some pains to familiarize himself with the operating principles and the inherent economies of the diesel engine. We are sure the backer of the diesel racing car about which the article was written, can't possibly be deluding himself with the goal of a diesel for small cars or for any kind of passenger cars in this country. Although diesel engines are now being used profitably in taxi-cabs and other high-usage small vehicles in Germany and in small trucks in South America and other regions of extremely high priced gasoline, the idea of diesels for passenger cars in this country, as long as conditions remain anywhere near the present status, is an economically unfeasible one. The American (U.S.) public is not sufficiently economy minded to make possible such a change, and diesel engines in such service would not be economically justified to begin with. . . . There were two other statements in the article which . . . might give your readers the wrong conception of diesel power. One was, "Ordinarily a diesel engine gives more miles per gallon than a comparable gasoline engine"; the other, "if that tax boost happens and the producer's price continues to rise, the technical advantages of diesels may be erased by the operating costs." Whether interpreted as miles per gallon, tons lifted per gallon, board feet sawed per gallon, or any other yardstick, the diesel engine makes available 48% more horsepower hours per gallon of diesel fuel than the gasoline engine does on gasoline. Thus "ordinarily" becomes a weak word to use in the comparison; "always" could be used without fear of contradiction. Also, it becomes evident that the tech-

TEXTILES used to present a ticklish merchandising problem.

To be sold, textiles have to be *seen*. Trouble was, leaving them unprotected on the counters meant depreciation and spoilage. Yet, it was next to impossible to find a protective wrap *transparent* enough to permit visibility, but *tough* enough to withstand constant handling.

Now, PLIOFILM has changed all that.

This dustproof, moistureproof film keeps textiles fresh and clean from manufacturer to store to consumer. Because of PLIOFILM'S strength, more units can be shipped per carton. It's so strong and puncture-resistant, breakage is virtually eliminated. And its gleaming transparency actually flatters the product, speeds inspection and sales.

Got a Problem Package? Whether it's bed sheets or spark plugs, fruit or T-bones, you'll find it profitable to investigate PLIOFILM and the services of Goodyear Packaging Engineers.

PLIOFILM promotes brand identification because it prints easily and in multicolors. It is adaptable to all types of machine packaging —also heat-seals readily with hand tools in packaging at store level.

For the complete story on PLIOFILM and what it can do for you, write for the *free* booklet, "Plain Facts About Pliofilm." Fill out the coupon below and mail it today.

Pliofilm, a rubber hydrochloride—T. M. The Goodyear Tire & Rubber Company, Akron, Ohio

GOOD THINGS ARE BETTER IN

Pliofilm

3-WAY PROTECTION AGAINST AIR, MOISTURE, LIQUIDS

GOODYEAR PACKAGING FILM

GOODYEAR, PLIOFILM DEPT. B-1
AKRON 16, OHIO

Please send me free copy of "Plain Facts About Pliofilm"

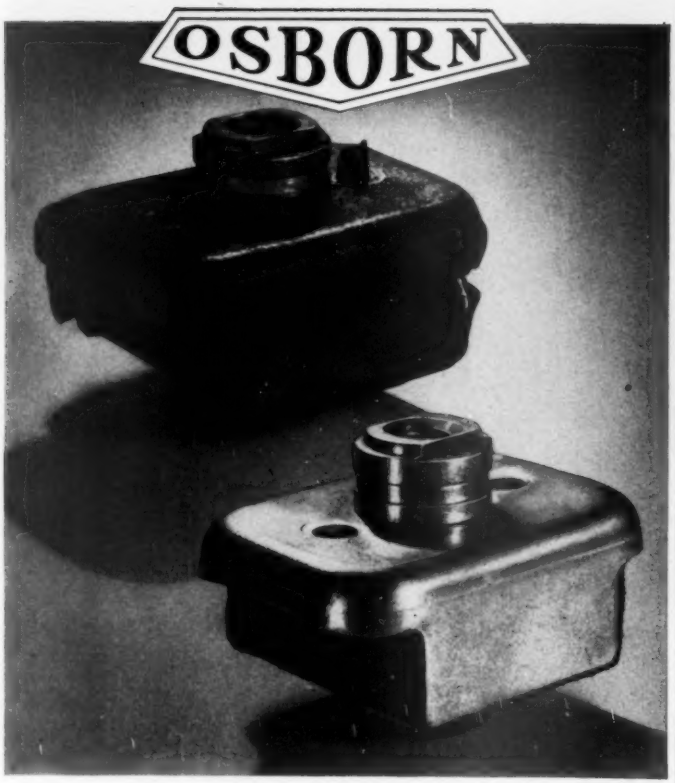
Name_____

Firm_____

Address_____

City & State_____

We think you'll like "THE GREATEST STORY EVER TOLD"—Every Sunday—ABC Network



Makes a good bond ready for marketing

These parts are motor mounts made by bonding rubber to a pressed steel body. On the left, after molding . . . it needs two things: (1) trimming off flash and excess rubber, and (2) cleaning of steel surfaces.

The **O**sborn **B**rushing **A**nalyst has helped manufacturers do both of these things with power brushing *in one speedy operation.* Here, it was a job for Osborn Disc Center* Brushes. These efficient wire wheel brushes remove excess rubber and produce smooth-finished parts quickly . . . as shown on the right.

Ask your nearby **OBA** to study your cleaning and finishing operations to find ways to improve your products and cut your costs. Call him today or write *The Osborn Manufacturing Company, Dept. 781, 5401 Hamilton Avenue, Cleveland 14, Ohio.*

* Trade Mark

Osborn Brushes

OSBORN POWER, MAINTENANCE AND PAINT BRUSHES AND FOUNDRY MOLDING MACHINES

nical advantages of diesel power will not be easily wiped out.

J. W. BROWN
ADVERTISING MANAGER
DETROIT DIESEL ENGINE DIVISION
GENERAL MOTORS CORPORATION
DETROIT, MICH.

More Diesels

Dear Sir:

Your attention is respectfully called to the picture and article entitled, *Hot Rod Engine for Farm Tractors* [BW—Jul.5'52,p36]. The Oliver Corporation built a pilot run of diesel wheel tractors in August, 1949, and entered regular production of such tractors in 1950. Accordingly we were surprised at the statement in the above story that Detroit Diesel . . . "also has its eye on a bigger deal—getting tractor manufacturers to supply the diesel as original equipment." This statement implies, of course, that tractor manufacturers do not supply diesels as original equipment. For your information, I . . . call your attention particularly to a factor which seems to be overlooked in the BW story. I refer to the fact that diesel tractors are somewhat more expensive . . . the extra cost of a diesel tractor is soon paid in fuel savings by the farmer who uses his tractor a high number of hours per year. The less frequent user may more efficiently use gasoline or in some areas LP gas.

Yours very truly,

R. W. MENNEL
DIRECTOR OF PUBLIC RELATIONS
THE OLIVER CORP.
CHICAGO, ILL.

Fertile Garbage

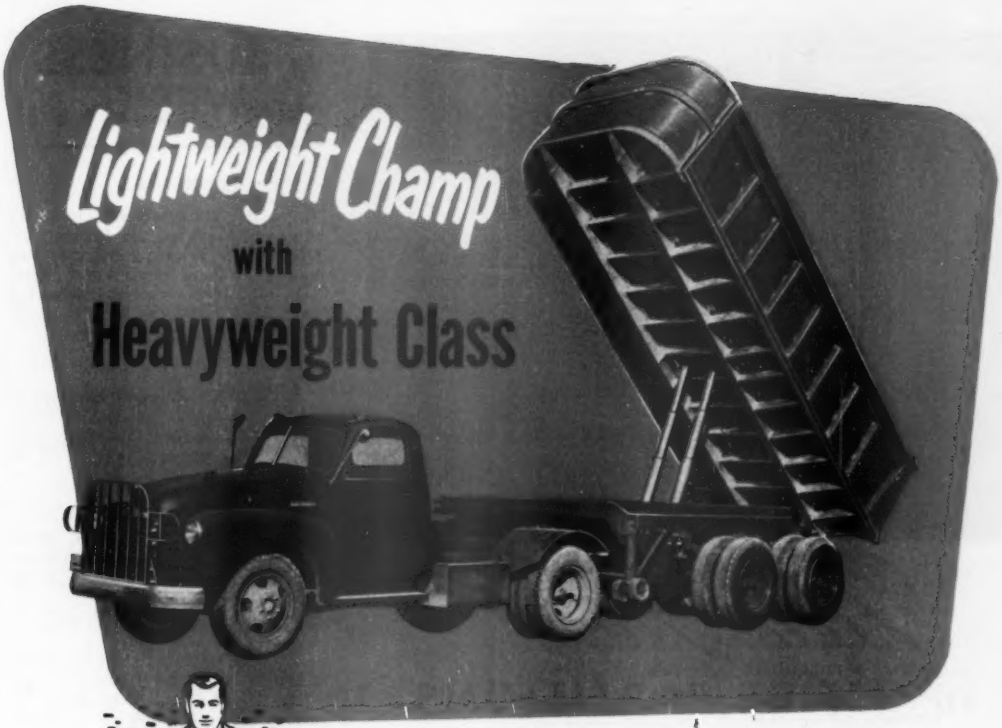
Dear Sir:

May I congratulate you on your courageous and very interesting article about the Oakland, Calif. garbage disposal plant [BW—Jul.12'52,p78]. I hope many industrial pioneers will be interested enough to copy the good example of the Compost Corporation plant. As a working farmer, I am concerned with the decline in soil fertility occurring in spite of all chemical fertilizers being used in ever growing quantities. I think that many agricultural chemists do not consider sufficiently the biological balance in the soil which is necessary for its health. I am also concerned with the difficulties of obtaining large amounts of natural fertilizer at a price which would make its application feasible and competitive. This latter problem, I think, can well be solved by the engineering talent and progressive business acumen of the appropriate industry.

Sincerely yours,

H. E. LOBSTEIN
BLOOMINGBURG, N. Y.

Lightweight Champ with Heavyweight Class



To the Executive Planning for TOMORROW...

This all-aluminum dump truck body weighs only 2345 pounds. The same "20-ton" body in steel weighed 4800 pounds. Thus aluminum offers a direct weight saving of more than 50% . . . and most important, this saving in gross weight is translated directly into an amazing *2455 pounds of added payload!*

Aluminum helps carry these bigger loads longer and at lower cost, too, because the aluminum bodies will never rust or corrode from exposure to the weather. With rust eliminated, the user of an aluminum body is assured of longer equipment life. He is also assured of lower maintenance costs because aluminum requires no painting or repainting.

Reynolds Aluminum Specialists worked closely with the Marion Metal Products Company of Marion, Ohio, in producing these all-aluminum, all-welded dump bodies for tractor-trailer trucking. If you would like the assistance of Reynolds Aluminum Specialists in adding sales appeal and reducing costs of your products, call the Reynolds office listed under "Aluminum" in your classified telephone directory. Or write direct to Reynolds Metals Company, 2585 South Third Street, Louisville 1, Kentucky.

REYNOLDS METALS

REYNOLDS ALUMINUM

MODERN DESIGN HAS ALUMINUM IN MIND

New Idea...

in OFFICE PARTITIONS

Translucent Glass Jalousies* Divide An Office Without Disjointing Its Organization

Something is happening in modern office design! Venetian window partitions or jalousies employing translucent glass by Mississippi are fast replacing solid separations that cut off light, ventilation and communication from adjoining areas. These interior jalousies help integrate the entire organization and permit more accurate control of temperatures for heating and air conditioning.

The new adjustable dividers give each office better control of illumination and air movement. Opened or closed, the translucent glass floods interiors with softened "borrowed light" that creates a friendly feeling of spaciousness and comfort.

Opened windows permit the executive an unrestricted view of his entire force. Yet, he can have complete privacy when desired with an easy turn of the crank. And the closed vanes reduce office clatter to a minimum.

When designing or remodeling your offices instruct your architect or contractor to install "venetian window" office partitions. Specify translucent glass by Mississippi, available in a wide variety of patterns wherever quality glass is sold.

*Mississippi Glass Co. does not construct or install jalousies. For estimates and other information, see your local supplier.

Send today for free booklet, "Figured Glass By Mississippi." Contains many ideas for commercial applications of this versatile, modern material.

MISSISSIPPI *Glass* COMPANY

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WORLD'S LARGEST MANUFACTURER OF ROLLED, FIGURED AND WIRED GLASS

In BUSINESS this WEEK . . .

• New Processes . . .

. . . are making over the electronics business. Motorola and International Telephone & Telegraph are now using printed circuits in standard gear. They cost less, weigh less, and take less room. P. 56

• New Boom . . .

. . . hit the air conditioning industry this summer. The manufacturers sold everything they could make and still left the customers hungry. P. 38

• Old Soldiers . . .

. . . don't always fade away. Some of them are filling top jobs in business. For instance . . . P. 30

• Old Miners . . .

. . . are cramping John L. Lewis' style in the current tussle over coal wages. If he calls a long strike, the pension fund will go dry. P. 102

• Old Dreams . . .

. . . are shining bright once again in Florida. The state figures that this time it has a prosperity that will last. P. 118

• Old Problems . . .

. . . still plague vital European industry as the Schuman Plan gets into operation. But there's hope that the coal-steel pool will help solve some of them. P. 106

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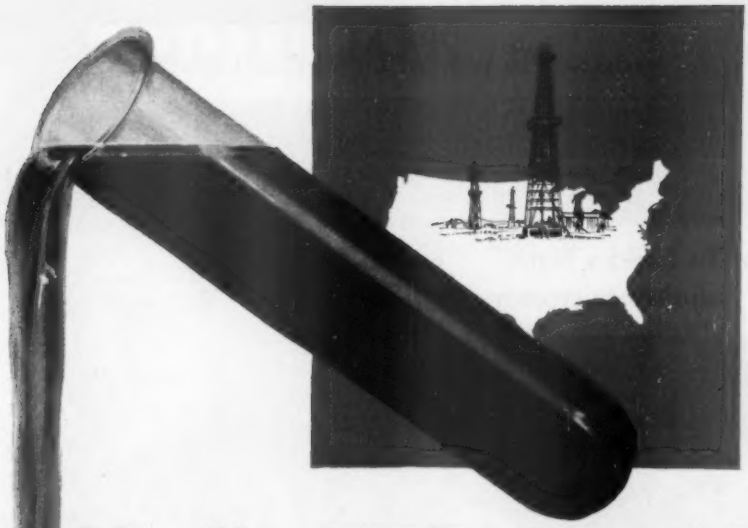
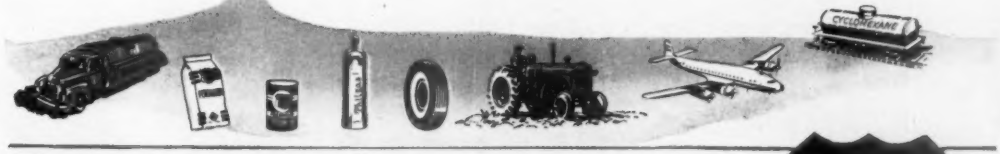


America's Most *Versatile* Raw Material...

Fuels, fertilizers, synthetic rubber, sulfur, carbon black, lube oil, materials for plastics and synthetic fiber . . . ***all from petroleum?*** Yes, these are some of many useful products which Phillips Petroleum Company manufactures from crude oil and natural gas.

By taking advantage of the ***versatility*** of petroleum, Phillips scientists constantly uncover new ways of using crude oil and natural gas. So today we are superimposing a large chemical business on a firm foundation of petroleum raw materials. This is in addition to our main business in fuels and lubricants.

Our company and our country have only begun to reap the many great benefits of diversified research and development in the new science of ***petrochemistry.***



PHILLIPS PETROLEUM COMPANY

Phillips Chemical Company, a subsidiary *Bartlesville, Oklahoma*

We Put the Power of Petroleum at America's Service

Phillips 66

PROBLEM: To prevent blood-count mistakes

ANSWER: Is it serious disease or minor trouble? Often a red and white blood-cell count will tell. Hundreds of tiny cells are jumbled together in an area 3/10,000ths of a square inch. Mistakes *can* be dangerous. AO pioneered and developed a unique instrument—the Bright-Line Haemacytometer—which throws blood cells into bold relief under the microscope, thus making them much easier to count accurately.

PROBLEM: To build a better student microscope

NEW AO STUDENT MICROSCOPE ON LEFT

ANSWER: "My neck gets stiff." "Microscope's too high." AO designers studied all teacher-pupil complaints and developed a new, comfortable-to-use microscope that has a built-in light. It's economical, tamper-proof, and hard to damage. Write us about your development problems. Address American Optical Company, 40 Vision Park, Southbridge, Massachusetts.

PROBLEM: How do babies' eyes develop?

ANSWER: What does a healthy baby see first? When should his eyes and hands start to work together? To investigate these and similar important questions, American Optical supported a specialized research project conducted by experts, who created an entirely new field . . . Developmental Optics.

American Optical

BUSINESS OUTLOOK

A BUSINESS WEEK SERVICE

Weather has taken a hand both in economics and in politics.

Our luck with crops has defied the law of averages for 15 years. It saw us through the shooting war and a good many years of the cold one.

But we now are in the grip of the worst drought since 1936; for many parts of the Southeast, it's the worst on record (page 29).

•

Drought and Economics—Food prices and wages are affected.

Food supplies aren't going to push 1948's record, much less set a new one. Industrial materials (cotton, oils) will be less plentiful.

This doesn't mean shortages. Things aren't that bad yet.

But supply prospects are dwindling at a ticklish time (BW-Aug.2'52, p17). Thus weather joins wages as an inflation breeder.

Don't, for a moment, miss the spiraling effect: (1) Drought boosts food prices; (2) higher food speeds the cost of living's rise; and (3) wages, more and more, are tied to the c-of-l.

•

Drought and Politics—This story has two parts.

Relief is the first. Drought aid is necessary. But who names the "disaster areas" and administers the payments? The Democrats.

Inflation is the other aspect. Truman told Congress, before controls were weakened, that there was more inflation ahead. The last reason he would have given for expecting it was drought. Now he'll try to take credit for the forecast.

•

Industry undoubtedly will be blamed for price increases brought about directly by drought and wages. This is true even though nobody has yet begun to feel the effects of higher steel prices.

Blaming business would be particularly convenient in case President Truman should call on Congress to revive price controls before election.

•

Some parts of the price picture may get out of focus as weather and inflation bring distortions.

Drought reports may be overdramatized. Cotton has suffered only locally. Corn got good rains this week and a big yield still is likely.

Forced marketing of livestock (meaning depressed prices now, high levels later) may be minimized by shipments into the Corn Belt.

Most of the big winter wheat crop was harvested before the drought.

•

Cotton prices zigzagged this week on both weather and trade news.

Cloth buyers last week gave New York's Worth Street its busiest time in a long while. Some mills opened their books for orders as far ahead as the first quarter; others withdrew to await clarification on prices.

Better demand for cloth sent mills out to cover cotton needs. This coincided with speculative buying on the drought news.

But it was a market that slumped at the sight of a rain cloud.

•

If you feel uneasy about 1953, you may find an ill omen in textiles.

Nobody bewails the industry's penchant for overproduction like a textile man. And nothing touches off round-the-clock output like solid bookings six months to a year into the future.

Orders aren't that solid yet—but the old giddy feeling is there.

Inflation hasn't shown any new signs of taking hold in the metal markets. (Note the unexpected drop of 1½¢ a lb. in the price of zinc on Wednesday.)

One reason is that a lot of metals, used in combination with steel, piled up during the strike.

Another is that foreign markets still are queasy.

Business abroad is unsettled. And there still is a desire to turn metal into dollars.

•

Copper may become a good deal more plentiful if the much-talked-of strike fails to come off.

There's a suspicion that users have been taking delivery on more than they needed for two months as a strike hedge. There's no certainty that they'd hang onto all this metal if the labor situation eased.

Or, if they did keep it, they might cut their forward buying.

•

Aluminum got its price increase this week, but the supply situation is easing a bit here as in other nonferrous metals. Rising output is a major factor—462,000 tons in the first half, 14½% over 1951.

•

Timing was the real surprise in this week's zinc price drop.

Zinc for galvanizing piled up during the steel strike. The grade used in die-casting was hit by the drop in auto output.

But prices held through the worst of the trouble. Then, just as things began to pick up, a leading custom smelter decided there was too much of the metal around and cut to 13½¢ a lb.

•

Employment was much less affected by the steel strike than you might have anticipated (mainly because layoffs don't count as unemployment).

Unemployment, the critical factor, remained below 2-million in July. In fact, it was little changed from most recent months.

The main impact is a negative one. July employment, at 62¼-million, failed to set a new record. And August also may fail to top last year's peak of 62.6-million (making 1952 the first postwar year to fall short).

However, nonfarm employment rose a little in July. The real reason we didn't make a new record was a drop of 500,000 in farm workers.

•

Record-smashing construction has been one of the big business stabilizers in the face of steel and steel-forced shutdowns.

Value of construction work done during June almost reached $3-billion; that was about $150-million better than the biggest month of either 1950 or 1951. And now July is estimated at almost $3.1-billion.

•

You hear a lot about record industrial outlays on construction. However, July fell a shade behind a year ago in spite of a 25% gain over a year ago for the seven months.

But that's just the privately financed section of industrial construction. Public industrial (much of it atomic plant) climbed to $181-million in July against $190-million for private.

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T.M. Reg. U.S. Pat. Off.

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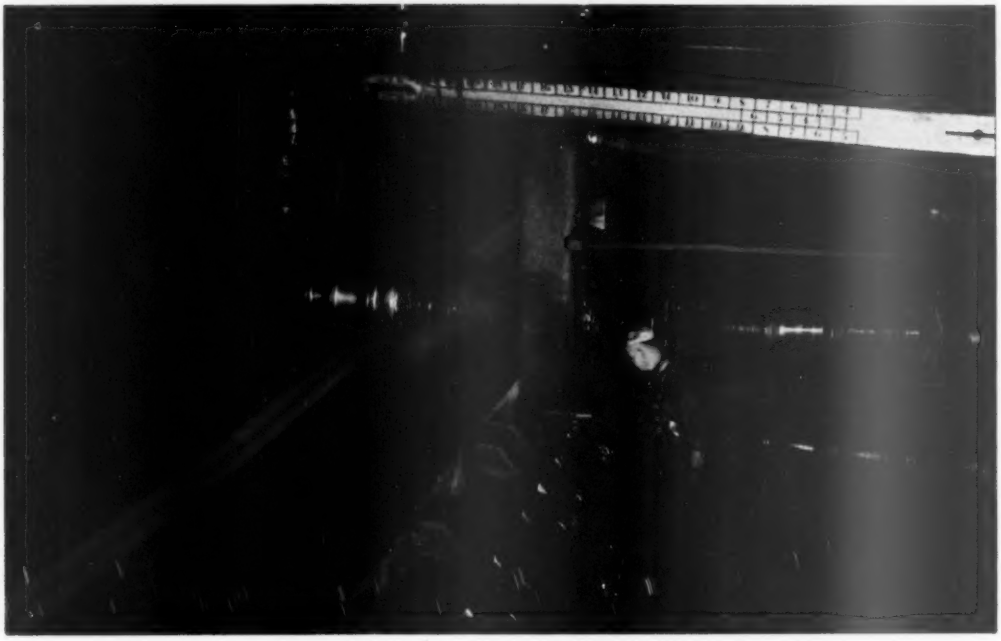
When you order letterheads, be sure to order "envelopes to match." By specifying MEAD BOND, you get top quality for your letterheads—with "envelopes to match."



Here's the structural shape of things to come!

From this basic structural steel shape, rolled from an ingot in this mill at Barium's Phoenix Iron & Steel Co., Phoenixville, Pa., comes so many of the metal things basic to our economy.

Basic shapes become basic products *right within Barium's family of subsidiaries,* as the photos below show you. Don't you think that such a *coordinated* effort in steel can serve your steel needs best?

It will pay you to look into the group of strategically located companies known as Barium Steel Corporation . . . controlling quality from blast furnace to finished product . . working as a self-contained unit to speed urgently needed orders.

For information on how the Barium team can bring joint knowledge to bear to solve your steel problem, address your problem to Barium at 25 Broad St., New York City. No obligation.

Barium

A coordinated effort of
15 companies working in steel

MILL PRODUCTS • SHAPES TO ORDER • END PRODUCTS

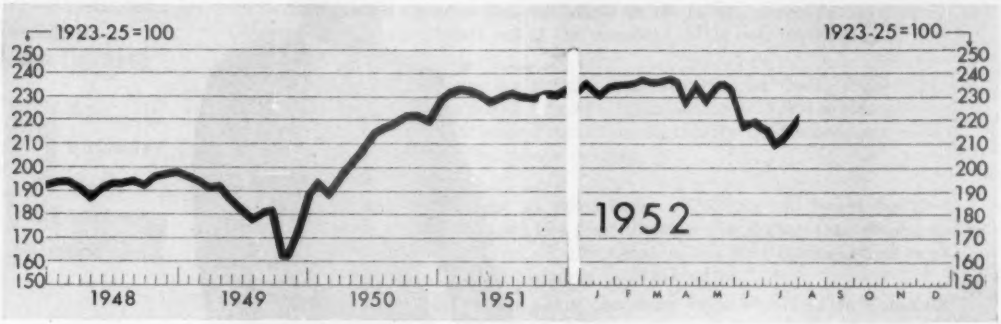
BAYONNE BOLT CORP. · CENTRAL IRON AND STEEL COMPANY · CHESTER BLAST FURNACE · CLYDE IRON WORKS, INC. · CUYAHOGA SPRING COMPANY · ERIE BOLT AND NUT COMPANY · GEOMETRIC STAMPING CO. · GLOBE FORGE, INCORPORATED · INDUSTRIAL FORGE & STEEL, INC. · JACOBS AIRCRAFT ENGINE CO. · KERMATH MANUFACTURING CO. · KERMATH LIMITED (CANADA) · PHOENIX BRIDGE CO. · PHOENIX IRON & STEEL CO. · WILEY MANUFACTURING CO.

This stiff leg crane was built at Barium's Clyde Iron Works, Inc., Duluth, Minn., from structural steel of its sister subsidiary, Phoenix. Whirley cranes, hoists, derricks are other Clyde products.

Phoenix structural steel is here used by another Barium member, Wiley Manufacturing Co., Port Deposit, Md., to build barges. Wiley also makes floating cranes, other materials-handling equipment.

This bridge girder is constructed from Phoenix structural steel by Barium's Phoenix Bridge Co., Phoenixville, Pa. This company builds and engineers bridges, buildings and other fabrications.

FIGURES OF THE WEEK



	§ Latest Week	Preceding Week	Month Ago	Year Ago	1946 Average
Business Week Index (above)	*222.5	†218.0	217.2	232.8	173.1
PRODUCTION					
Steel ingot production (thousands of tons)	1,737	†891	295	2,021	1,281
Production of automobiles and trucks	22,615	†42,514	86,036	117,010	62,880
Engineering const. awards (Eng. News-Rec. 4-week daily av. in thousands)	$81,611	$86,971	$55,469	$45,728	$17,083
Electric power output (millions of kilowatt-hours)	7,405	7,328	6,478	7,003	4,238
Crude oil and condensate production (daily av., thousands of bbls.)	6,132	6,071	6,102	6,201	4,751
Bituminous coal production (daily average, thousands of tons)	1,117	†1,104	1,525	†1,691	1,745
TRADE					
Carloadings: manufactures, misc., and l.c.l. (daily av., thousands of cars)	62	61	64	75	82
Carloadings: all other (daily av., thousands of cars)	39	40	44	62	53
Department store sales (change from same week of preceding year)	–2%	+1%	+1%	–22%	+30%
Business failures (Dun and Bradstreet, number)	152	137	131	171	217
PRICES					
Spot commodities, daily index (Moody's Dec. 31, 1931 = 100)	444.2	441.6	435.4	466.8	311.9
Industrial raw materials, daily index (U.S. BLS, Aug., 1939 = 100)	268.5	267.9	267.6	311.7	198.8
Domestic farm products, daily index (U.S. BLS, Aug., 1939 = 100)	360.3	356.6	351.2	354.8	274.7
Finished steel composite (Iron Age, lb.)	4.131¢	4.131¢	4.131¢	4.131¢	2.686¢
Scrap steel composite (Iron Age, ton)	$42.00	$41.75	$39.50	$43.00	$20.27
Copper (electrolytic, Connecticut Valley: lb.)	24.500¢	24.500¢	24.500¢	24.500¢	14.045¢
Wheat (No. 2, hard and dark hard winter, Kansas City, bu.)	$2.30	$2.28	$2.22	$2.32	$1.97
Cotton, daily price (middling, ten designated markets, lb.)	40.24¢	39.42¢	39.68¢	35.18¢	30.56¢
Wool tops (Boston, lb.)	$2.10	$2.10	$2.05	N.A.	$1.51
FINANCE					
90 stocks, price index (Standard & Poor's)	202.0	200.5	198.2	182.1	135.7
Medium grade corporate bond yield (Baa issues, Moody's)	3.52%	3.50%	3.50%	3.52%	3.05%
Prime commercial paper, 4-to-6 months, N. Y. City (prevailing rate)	2¼–2⅜%	2¼–2⅜%	2¼–2⅜%	2¼–2⅜%	¾–1%
BANKING (Millions of dollars)					
Demand deposits adjusted, reporting member banks	52,766	52,448	51,708	50,383	††45,210
Total loans and investments, reporting member banks	76,115	76,191	77,493	70,100	††71,147
Commercial and agricultural loans, reporting member banks	20,581	20,626	20,567	19,124	††9,221
U. S. gov't and guaranteed obligations held, reporting member banks	33,267	33,256	33,582	30,997	††49,200
Total federal reserve credit outstanding	24,907	24,674	24,155	24,282	23,883

MONTHLY FIGURES OF THE WEEK		Latest Month	Preceding Month	Year Ago	1946 Average
Private expenditures for new construction (in millions)	July	$1,990	†$1,925	†$1,968	$803
Public expenditures for new construction (in millions)	July	$1,079	†$1,055	†$905	$197
Manufacturers' inventories (seasonally adjusted, in billions)	June	$42.1	†$42.4	$39.0	$21.3
Consumer credit outstanding (in millions)	June	$20,941	†$20,298	$19,256	$6,802
Installment credit outstanding (in millions)	June	$14,404	†$13,811	$12,955	$3,025
Employment (in millions)	July	62.2	62.6	62.4	55.2
Unemployment (in millions)	July	1.9	1.8	1.9	2.3

* *Preliminary, week ended Aug. 2.* †† *Estimate (BW—Jul.12'47,p16).* *N.A. Not available.* † *Revised.* § *Date for "Latest Week" on each series on request*

"THEY THOUGHT I COULDN'T LIVE"

"Nearly two years ago I slipped off a roof where I was working . . . and landed on a railroad track 110 feet below.

"I was so badly smashed up nobody thought I could reach the hospital alive. Three crushed vertebrae, broken pelvis, both ankles crushed, left leg broken in two places, compound fractures of my jaw and left arm. And damage to my spinal cord which left me paralyzed from the waist down.

"Those doctors did a wonderful job. They saved my life. Later they operated and relieved much of my paralysis.

"Then they moved me to the Liberty Mutual Rehabilitation Center in Boston. Though I was one of the most serious cases they had ever seen, these people knew just what to do. I began with easy exercises. Soon I could use simple tools. Finally I learned to walk all over again. Now I get around on these canes. I'm being taught at Joseph Bulova School of Watchmaking, and I can look forward to earning an independent living as a watchmaker or repairman."

That's the true story of a courageous young man named Paul Orva.

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INSURANCE COMPANY
HOME OFFICE: BOSTON

We work to keep you safe

Rehabilitation is just one phase of Liberty Mutual's Humanics Program which brings together all activities for preventing accidents . . . for reducing disability and costs when accidents occur. Humanics combines specialized advice in Industrial Engineering and Hygiene with Claims Medical Service and Rehabilitation — all directed to reducing loss, including the cost of Workmen's Compensation Insurance.

To find out how Humanics has reduced accidents, lowered costs and improved production in plants like yours, just call or write for the booklet, "Humanics." Look in the Yellow Pages of your Telephone Directory for the nearest Liberty Mutual office, or write to 175 Berkeley Street, Boston 17, Massachusetts.

★ *Better Compensation Insurance Protection at Lower Cost through HUMANICS* ★

WASHINGTON OUTLOOK

WASHINGTON BUREAU AUG. 9, 1952

A BUSINESS WEEK SERVICE

The control agencies are just about on the skids. Once the steel-strike damage has worked itself out of the economy, little real regimentation will remain in Washington.

Already the agencies are getting that "hanging on" look. Appropriations cuts forced the Office of Price Stabilization to let 7,000 employees go. Numerous OPS and National Production Authority field offices are being closed and enforcement branches reduced.

Ellis Arnall is quitting as price boss. OPS has lost heart for new regulations. Indeed, the word has gone through the agency that when you modify existing orders, leave out any requirement that businessmen must keep detailed records or send reports to Washington.

Roger Putnam complains about the weak wage stabilization Congress provided. The new board installed this week can't handle disputes, and is not inclined to be very tough.

Rising prices and wages will be the result as long as big spending continues. And no one expects any cuts in spending in this political year. Prosperity is good politics.

Metals rationing will end for thousands of companies on Jan. 1. Until then, steel will be harder to get for civilian uses because of losses due to the steel strike. But in 1953, medium and small companies will be able to write their own tickets for much more steel, copper, and aluminum.

Here are NPA's plans for the first quarter of next year:

Steel: If you use 500 tons of carbon steel or less per quarter, you can write your own ticket. The same goes for 90 tons of alloy steel and 10 tons of nickel-bearing stainless. Self-authorization limits now are 60 tons of carbon steel, 16 tons of alloy, 500 lb. of nickel-bearing stainless.

Copper: 20 tons per quarter, as against today's 10.

Aluminum: 30 tons per quarter, as against today's 20.

•

Post-mobilization controls are getting more consideration. The technicians don't want to see everything go out the window when the Defense Production Act begins expiring next April. They want skeleton staffs and key statistics from business to continue.

Object: to speed up control machinery in case of all-out war. For example, standby controls would enable a Controlled Materials Plan to get into high gear in three months instead of the nine it takes to start from scratch.

•

Political uncertainty contributes to Washington's general unrest. Stevenson is a question mark to most top appointive officials. They don't know just where the Democratic campaign is going, so they are uncertain which way to jump.

Secretary Brannan went to Springfield to get the word. Agriculture Dept. activities in the farm areas now will be fitted to the campaign. And Interior Secretary Chapman, an early Stevenson adviser, seems well set.

But most other Administration men must wait and see. This causes a letdown—an official can't get much steam up for his job. One cold fact: If Stevenson wins, the uprooting of men and jobs next January will be widespread. The governor shows every sign of taking a dim view of most Truman men.

WASHINGTON BUREAU
AUG. 9, 1952

Draft deferments will be harder to get this fall. September calls for men total only 30,000, but the quota will be upped to 50,000 a month for the rest of the year.

Fathers will be called if present plans are put into effect. Gen. Hershey intends to ask Truman for authority to draft fathers of only one child. This, in an election year, is a clear indication of how close to the bottom of the barrel we are getting. Fathers are the biggest pool left: Over 900,000 men have dependency deferments.

Apprentices will still get deferments—but only temporarily. Figure that your learners will go into uniform just as soon as you can get replacements or the apprenticeship is over.

Despite the tougher draft, drains on reserve personnel may ease next year. The new reserve law Congress voted put a 1.5-million man ceiling on the ready reserve forces; that is, the first stage after a man has completed active duty.

This ceiling will force transfers of men to standby status—a status that will keep them out of uniform short of major war. So your men in the ready reserve won't have the military breathing down their necks continually. They won't even have to take summer training unless they want to.

Another gain: Your World War II Army and Air Force commissioned reservists can quit next April, won't be subject to any more duty.

•

The civilian-military dispute over planes may be compromised. The Air Force and Navy are considering accepting some of the Defense Production Administration's advice on what planes to produce, what models to ditch (BW—Jul.26'52,p29). In return, the services expect to keep their right to buy inviolate.

The Air Force already has speeded up output of two jet engines recommended by DPA. Other changes will follow.

The Navy hasn't gone along—yet. But the Joint Chiefs of Staff are expected to take a hand. The Navy admits that DPA picked the best planes to concentrate on, but doesn't like the hint that DPA expects to have a say in buying. The Air Force shares this view, but was willing to take some of the recommendations to avoid a public fight.

The Joint Chiefs will take up the case in making new policy on the mission of the three services. The chiefs are expected to ditch the superbomber for good, rely on medium strategic bombers, and give higher priority to tactical support of troops.

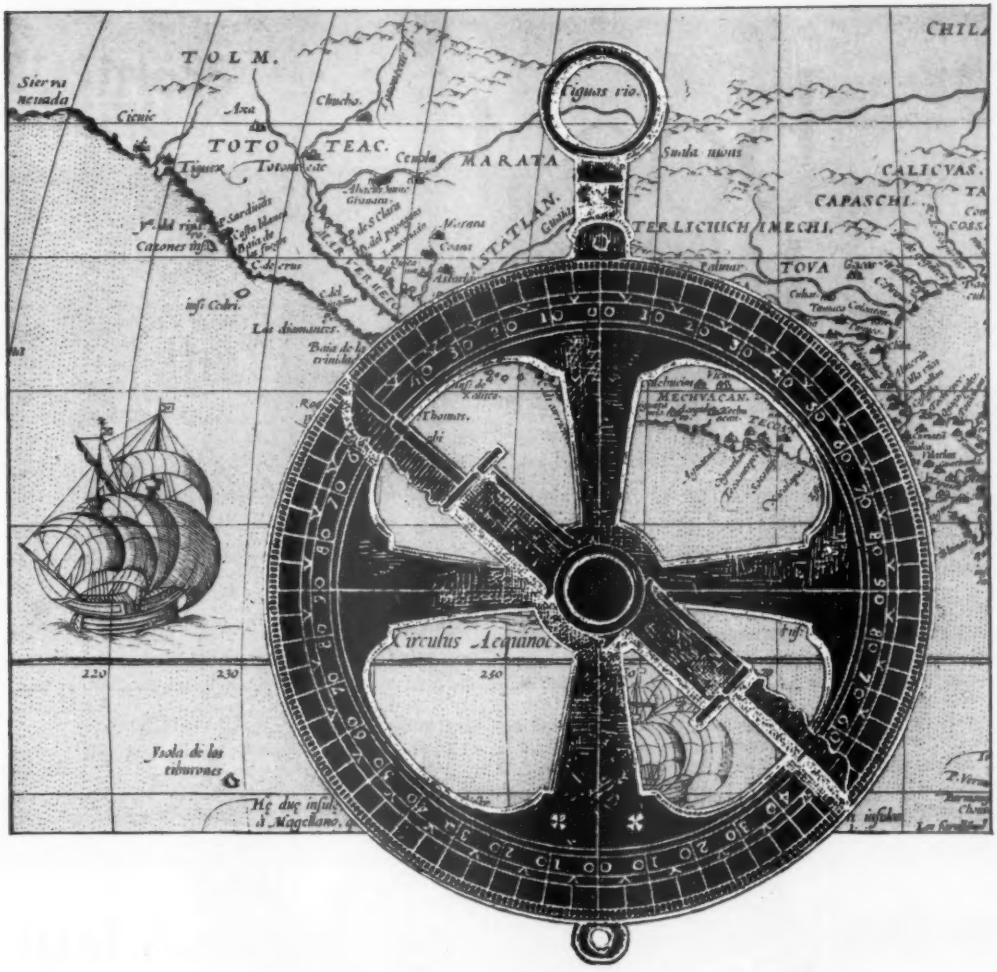
Navy carrier bombers may be given a part in strategic bombing, teaming up with Air Force mediums flying from overseas bases.

This switch would call for the new alignment of plane priorities that DPA demands.

•

If the drought (page 29) continues, will Truman call Congress back? Some Agriculture Dept. people are talking that way. They have two reasons: White House contingency funds for the relief of stricken farmers won't last much longer; and beef and cattle growers want some tax relief to get money to replenish herds.

There's a bill on taxes that could be dusted off. It would void taxes on money obtained from forced sales—if the farmer uses that money to build up his stocks again.



Ancient Problem... MODERN SOLUTION

For centuries, a mariner's only instruments of navigation were the sun and stars. Then came early forms of compasses and astrolabes—primitive instruments—but at least they relieved navigators from utter dependency on the solar system.

With the development of the Sperry Gyro-Compass early in the 20th Century, a new era was born . . . an era that made navigation an exact science. While great improvements had been made in magnetic compasses and sextants, for the first time navigators had in the Gyro-Compass a *true-north seeking direction* indicator free from the disturbing influences of electrical storms, ship's magnetism, variation and deviation due to local attraction.

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Sperry Loran gives the modern mariner his *position* anytime, in all weather, anywhere within range of radio signals from land-based transmitting stations.

Sperry Radar is his *safeguard* and protection when visibility is poor . . . permitting his ship to operate on schedule through fog, rain and darkness.

Today, this group of three Sperry instruments—with their complementary auxiliaries—provides a vessel with a modern means of making navigation safer, simpler and more efficient.

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•

HERE'S A STRIKING EXAMPLE. Wells Cargo, Inc., Reno, Nevada—one of the West's great trucking lines says, "Five years ago we changed to *Texaco Marfak* for chassis lubrication and *Texaco Marfak Heavy Duty* for wheel bearings. Since then our trucks have spent a good deal less time in the shop, and we have spent a good deal less money for maintenance."

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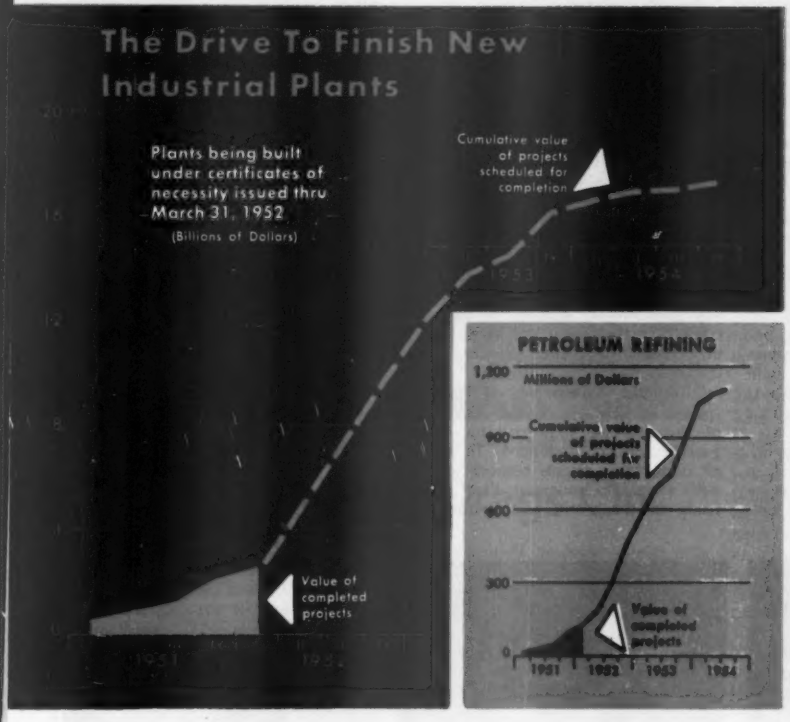
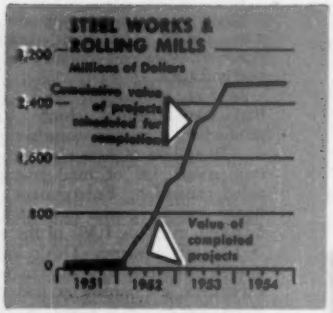
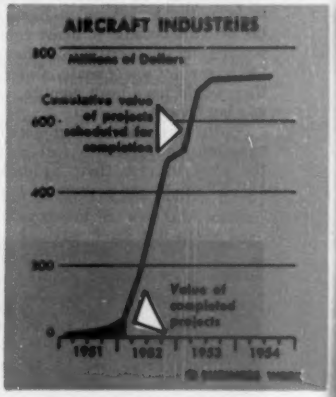
BUSINESS WEEK

NUMBER 1197

AUGUST 9, 1952


The Drive To Finish New Industrial Plants
Plants being built under certificates of necessity issued thru March 31, 1952
(Billions of Dollars)
Cumulative value of projects scheduled for completion
Value of completed projects
1953
1954





Just Ahead—Expansion's Windup

Now is the time when the post-Korea rush to expand basic industry starts paying off. And then what?

The charts above show clearly where U. S. industrial expansion is headed under the spur of mobilization.

Total value of new plants actually completed and operating is still a small slice of pie (lower left in each chart). But more than half the bricks and machines are in place. Over the next 18 months, most of the balance of the expansion program that has now topped a $21.3-billion total will be finished.

The government planners think there's another $6-billion to $8-billion to come on top of that, for a total of possibly $30-billion over-all. Any businessman's next question: What happens then?

• **Up to Businessmen**—In the final analysis, what happens depends on businessmen themselves, not on the planners in Washington. All through the mobilization, bureaucrats have had the title of planners, but it's individual businessmen who have made the decisions. There's ready proof of this:

Government's only incentive to arms-making expansion has been the fast amortization privilege written into the tax law late in 1950—far less than the government financing used in World War II. But as it turns out, Defense Production Administration's main problem all along has been to ration certificates of necessity among companies that clamored for them.

• **What Next?**—Now the end of this government encouragement is in sight.

What happens next depends on businessmen's own estimates of future consumer demand. Of course, no company wants to be caught overproducing when the mobilization impact dies away. Businessmen and economists, therefore, are taking a fresh look at what we're building, in order to figure where we go from here.

I. Expansion—What Kind?

When Korea erupted, a critical decision was made. Instead of all-out mobilization that would convert industry overnight to maximum production of weapons, Truman and his aides decided on a drive to expand the basic resources of the country.

Expansion of plant and equipment, therefore, isn't primarily in the narrow field of munitions-making. Most of it is capacity that will serve in the peace-time market, too. The five larg-

est tax-aided expansion programs—accounting for 67% of the dollar value of total government-assisted installations—are fundamental industries: iron and steel, railroads and other transportation, public utilities, chemicals, and petroleum.

Most of the other industries in the program are broad, too: pulp and paper, iron mining, aluminum, machinery, pipelines, stone and ceramics industries, coal and coke.

In fact, the largest single industry that was expanded chiefly for war production is aircraft manufacture—and its $70-million of new plant represents only about 4% of total government-aided expansion. Enlargement of ordnance capacity comes next with about $27-million—some 1.3% of the total.

• **The Bandwagon**—This kind of growth obviously appealed to industry executives; no bureaucrat had to plan it for them. DPA admits it has had to keep the brakes on in handing out tax benefits because so many companies wanted to get certificates they could use to pry out scarce materials for plants they would have built anyway, without any tax benefit.

With this "house that Jack built" situation, the planners feel they're in the clear in case their $25-billion or $30-billion program doesn't work out. Industry executives, they say, made the final decision to put the company's money—not the taxpayers' money—into new capacity.

II. From Here On Out

It makes sense, too, that the bureaucrats are only now getting around to setting the expansion "goals" they have supposedly been aiming at all along.

There has been no need to push toward such goals. Industry decisions were taking care of that very nicely. And DPA officials have been too busy shuffling applications for fast write-offs to figure out just how much capacity they'd like to see in any given industry. There are exceptions, of course, such as steel and aluminum, for which the planners had readymade goals at the outset. But mostly they just parceled out the certificates with confidence that there was little danger of overshooting the targets they'd set up later on.

• **Now the Goals**—Now DPA has spelled out the targets for about half of the 300-odd industries for which goals are to be announced. In almost all cases, these targets coincide closely with expansion programs that are already in the works. So, with some exceptions, all they mean is: "We think we're about finished with handing out certificates."

• **Exceptions**—Though most industries can see the final turn in the expansion road, there are exceptions: the handful of semifinished or end-products in which the planners figure demands of all-out war would swamp existing or planned capacity.

Among these are aluminum and some nonferrous metals; certain forms of steel such as structurals, castings, and plate; some special alloys, and a few items having only military uses.

• **Putting on the Heat**—Between now and yearend, DPA's top officials will be lining up the more obscure bottlenecks that might be crippling in total war. Then they want to do what they did in the aluminum program—put it up to Congress.

Remembering the aluminum case, the most the controllers expect is a lot of fumbling and buckpassing. For a year or more, the mobilizers have been warning that we wouldn't have enough aluminum to support all-out war. Yet they've had no support from Congress for either alternative they suggested: a program to add further to U.S. capacity, or a long-term purchase contract to encourage Canadian expansion (BW—Jul.26'52,p82).

AT NOON, westbound Zephyr moved through Tunnel No. 41 for the last time.

MINUTES later, dynamite blasted the rock spur into the nearby Colorado River.

BY 6 P.M. the completed temporary track was ready for the eastbound Zephyr.

Denver & Rio Grande Lays a Track between Trains

For years, Tunnel No. 41 on the Denver & Rio Grande Western R.R. main line to Salt Lake City has given the railroad a lot of headaches, particularly in the matter of clearance. The tunnel ran through a mere spur of rock on the precipitous side of Colorado's Gore Canyon, west of Denver. Finally, the railroad decided that the tunnel must yield to modernization.

Contractor Ben Arp made a careful study of the faults and fractures in the 200,000 tons of rocks which constituted the spur. Five tons of dynamite were placed. At noon one day, the westbound California Zephyr passed through the tunnel for the last time. Then the tunnel was blown.

Within minutes, track crews were cleaning up the shattered mass of rock—so completely broken up that no further blasting was necessary. Temporary tracks were laid outside the main-line rail, to take trains around until the cleanup could be completed. Six hours after the blast, the eastbound California Zephyr edged its way cautiously over the temporary track—with its passengers serenely unconscious of what had happened.

LIVESTOCK and crops in some areas are withering away as a . . .

$1-Billion Drought Drags On

A farmer near Richmond, Va., looked out over his parched fields last week, sighed resignedly, and said: "It's always too hot, too cool, too wet, too dry, or too something." This summer, it's too hot and too dry.

Most of the South Atlantic, Gulf, and northeastern states, plus a good half of Texas are withering under the effects of a summer-long drought. Crops are burning up; livestock is going hungry for lack of feed. Unofficial guesses put the damage so far at close to $1-billion.

At midweek, 12 states and parts of four others were on the Dept. of Agriculture's official disaster list. Several more were expecting to make it soon.

• **Federal Aid**—The possible economic consequences of this situation weigh heavily in Washington.

Federal and state directors of the Farmers Home Administration (a bureau of the Dept. of Agriculture) got together this week in Atlanta, Ga., to settle the details of handing out disaster loans to stricken farmers. Under the law, such a loan can go to any farmer in an officially designated disaster area, provided he can't get enough credit from local banks or other sources. There's no limit on the amount he's allowed to borrow. Interest rate is 3%, repayment time from one to five years depending on how the money is used.

Other government people are working out a livestock feeding program whereby hay, corn, and other feed will be trucked or—if necessary—flown into disaster areas. Neither the feed nor the loan program has got under way yet, but FHA officials expect to have both rolling in high gear within two weeks.

• **Survey**—The type and extent of damage vary from state to state. Here's what's happening in some of the worst-hit areas:

Tennessee is having it about as bad as anybody. Last year's total crop (major items: cotton, corn, hay) was valued at $400-million. Damage to this year's crop is already estimated at half that—$200-million. Farmers figure they're getting only 40% of last year's hay production; this will have heavy effects on the size and quality of the state's meat output later in the year.

Arkansas provides a graphic illustration of the shortage of water. Almost every year, floods run people out of the state's lowland areas. This year, streams and reservoirs in the same areas are almost dry. Today, you have to go down 100 ft. to get more than a trickle. Crop losses in the state have already started prices leapfrogging: Green beans for canning purposes now bring $100 a ton; last year they were $80 a ton.

North Carolina outlines its troubles this way: Tobacco, a $100-million loss; corn, $50-million; hay, $12-million to $15-million; pastures, $10-million; livestock, $25-million. That adds up to $200-million. The last straw for many Carolina farmers came last week. On July 30, the sky filled up with fat, juicy stormclouds. But it didn't rain; it hailed. Result: more crop damage, amounting to around $15-million.

New England hasn't suffered so much from heat as the southern states, but lack of rainfall has taken its toll. Maine, Massachusetts, Connecticut, and Rhode Island are on the disaster list. Connecticut's tobacco crop is in particularly bad shape.

Georgia figures it has lost about half of its crops. Most of the state's corn is ruined beyond help. Milk production is down 25% to 30%.

• **Other Losers**—Farmers aren't the only people who are unhappy about the drought. Forest men are scared stiff of fires and worried about the thousands of shrubs and young trees that are dying. Water and power companies—though so far not in any real trouble—are nervous about the future; Asheville, N. C., reports that 25% of the water stored in its big reservoir is gone.

The average citizen, too, is having his troubles. In Chattanooga, Tenn., long distance telephone operators got so fed up with the heat (up to 106F) that they walked out. Workers in two other towns joined them. Nashville suburbanites have been warned against an invasion of rattlesnakes, which have been coming out of the woods in search of water. In New York and other big cities, afternoons have become so hot that office workers have been sent home early—sometimes at noon.

In the end, of course, it is the average citizen who will have to pay for the losses. Prices of fresh fruits and vegetables, usually down seasonally at this time, are actually climbing in some markets.

• **The Silver Lining**—Not everybody is in tears, however. Crops in the Midwest and West aren't faring badly. Industrial production and retail sales almost everywhere are holding steady, show few big fluctuations other than those resulting from the June-July steel strike and from normal seasonal causes.

Certain segments of the economy are actually profiting from the hot, dry weather: Sales of air conditioning units (see page 38), fans, bathing suits, garden hoses, and the like are booming. A distributor of fans in Birmingham, Ala., says that in January his warehouse held 20% more fans than he sold in all of 1951. By the middle of June this year, he was ordering more.

• **Weather Report**—No relief is in sight. The U.S. Weather Bureau issued its monthly 30-day forecast last week. The outlook: normal (that is, slight) or subnormal rainfall for most of the country through August. This will be no help. Experts say that present drought losses can be minimized only by a solid, three-day rainfall.

BRASS HATS IN INDUSTRY

GEN. DOUGLAS MacARTHUR
Chairman, Remington Rand, Inc.

GEN. JOSEPH T. McNARNEY
President, Consolidated Vultee

ADM. BEN MOREELL
Chairman, Jones & Laughlin Steel Corp.

GEN. LUCIUS D. CLAY
Chairman, Continental Can Co.

GEN. BREHON SOMERVELL
Chairman and President, Koppers Co.

GEN. E. R. QUESADA
Vice-President, Olin Industries, Inc.

GEN. IRA EAKER
Vice-President, Hughes Tool Co.

GEN. JACOB DEVERS
Technical adviser, Fairchild Aircraft Corp.

Business Tries Reverse Recruiting

More and more generals and admirals these days are beating their swords into corporate shares. Latest military man to enter the business field at the top: Gen. of the Army Douglas MacArthur. Last week he became chairman of Remington Rand, Inc., at a reported $100,000 a year.

No one was surprised by MacArthur's appointment. Ever since he was fired by President Truman, he had been mentioned for a Rem-Rand spot (BW—Apr.14'51,p16). But his case points up how industry, more than ever before, is scouting high-echelon military circles for executive specialists.

• **Who's Who**—The pictures give an idea of how successful the search has been. Military men who are outstanding administrators or engineering specialists have had no trouble trading their brass hats for high-priced Stetsons—at salaries that make their military pay look picayune.

It's pretty obvious why a general would want to make such a trade. A fat salary in five or six figures is one

good reason. Another is a chance to use talents that, toward retirement age in peacetime, may go to waste in thumb-twiddling Army jobs.

It's less obvious why industry, traditionally critical of military bureaucracy, seeks to hire them.

• **Aptitude Test**—There's no single answer to this question. Some cynics see the trend as a not-subtle five-percent scheme. As Cosmopolitan magazine put it: "In business circles the word has gone out: Get yourself a general! What branch of government spends the most money? The military. Who, even more than a five-percenter, is an expert on red tape? A general or an admiral. So, make him chairman of the board."

That's one way to look at it. But it doesn't hold water in most cases. The military man turned business executive usually has special talents the company can use.

The 73-year-old MacArthur, for example, has a definite assignment in keeping with his long experience overseas. He is to help Rem-Rand build up its forign business, which has quadrupled in the last five years.

• **Lucius Clay**—Other companies have hired military men for equally specific reasons that have nothing to do with their knowledge of Washington red tape. Gen. Lucius D. Clay, chairman of Continental Can Co., for instance, refused one job and quit another because the companies got deep in government business. Clay wanted no part of it.

Clay took the Continental Can job with his record as an executive in the German occupation fresh in management's mind. At Continental Can he is the boss. He sets policy, puts his finger in top-level operating decisions (such as advertising campaigns) and has set his own goals for the company he took over.

• **Coke and Steel**—Pittsburgh has two prime examples of why companies beat the bushes for military brass: Gen. Brehon Somervell, chairman and president of Koppers Co., and Adm. Ben Moreell, chairman of Jones & Laughlin Steel Corp.

For Koppers, the choice of Somervell meant a major reorganization of the management setup. He evolved his now-famous centralized controls that keep a tight administrative line on the widely spread branches of the company (BW—May14'49,p70).

Moreell, organizer of the Seabees, is best known for his handling of ticklish labor relations for the Navy when it shifted from civilian construction crews to the uniformed labor that built installations all over the world. His construction experience also paid off in guiding a $430-million job of rehabilitation and modernizing J&L plant.

Tightening Up Controls

● Controllers revamp the regulations to try to undo the damage of the steel strike.

● Fourth-quarter steel goes first to armed services, Atomic Energy Commission, and machine-tool makers.

● Producers of consumer goods will have to queue up behind, but can have the kinds of steel the military doesn't want.

● This way, the military hopes to get arms production back on schedule by the first of the year.

Only producers of machine tools, end items, or components for the armed forces or Atomic Energy Commission need look to Washington for much help in getting steel for the next five months.

So far, government controls officials have made just two exceptions. They ordered the steel mills to up their deliveries to steel warehouses—but only after they have filled priority defense needs: That's largely to take care of small concerns, who are the warehouses' chief customers. They also gave a green light to can manufacturers on their orders for tinplate, to get as much as possible of the food and fruit crops into cans during the packing season.

• **Back on Schedule**—After the turn of the year, the controllers hope they can loosen up a little. Top military planners told Henry H. Fowler, head of both Defense Production Administration and National Production Authority that they could get arms production back on its prestrike schedule by Jan. 1, if they could get the steel needed for end items and components, and the machine tools to make them.

Fowler is giving the military bosses what they want—about double the nearly 1-million tons of steel per month they had been using before the strike started June 2.

• **No Makeup**—The idea is just to get arms output up to prestrike levels, maybe a little above that—not to try to make up production lost during the strike.

Production of nonmilitary items will have to catch up later, maybe not until the second quarter of 1953. But output of consumer goods probably will be on the track again before some of the so-called defense-supporting production. That's because consumer goods don't compete with arms production for certain types of steel—high alloy steel, plate, structurals, castings, forgings.

• **Backed Up**—Fowler has backed up his decision to give the military what they want with a series of temporary regulations—all within the framework of the Controlled Materials Plan. The following directives apply for the third quarter:

(1) Give priority to orders of the armed services, the Atomic Energy Commission, and machine-tool makers, together with producers of components for these items.

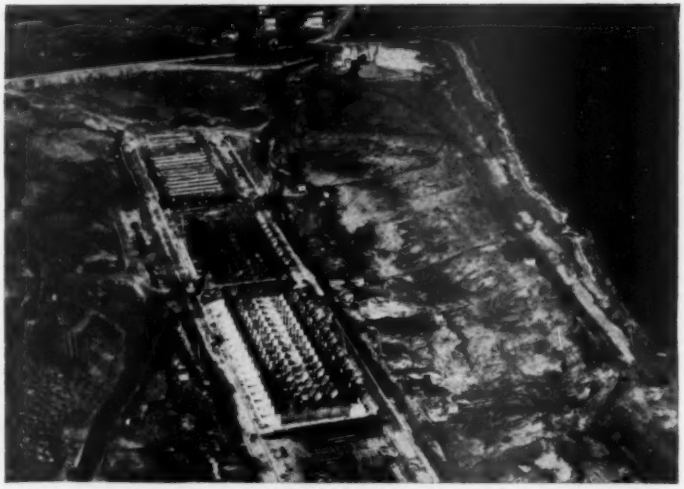
(2) Deliver all second-quarter and third-quarter orders of the priority producers on or before Nov. 30.

• **Go Ahead**—That's about all that Fowler or anyone else could do about third-quarter steel. Most orders for the quarter were already on the mills' books. Some orders were already being worked on when the strike began. That's why Fowler decided that the best thing to do was to let the mills go ahead as far as possible with production for the quarter.

The story for the three months starting Oct. 1 will be a far different one. Last week Fowler made a temporary change in most of the CMP rules—for the fourth quarter only. First, he ordered all mills to reserve a percentage of each month's production for military, AEC, and tool orders. The required percentages of steel shapes and forms just about equal the prestrike take of those three programs—100% of shell steel, all armored plate, 18% of heavy structurals, and 35% of seamless tubing.

• **Strings Attached**—There's a joker in this requirement. The percentages are to cover only fourth-quarter needs. Carry-over orders, which must be filled by the end of November, cannot be included. Also, any mill that gets orders in excess of the percentages from these priority users must still take them—at the expense of a nonpriority buyer.

The same kind of priorities apply to construction. Virtually no new starts requiring large quantities of steel will be allowed unless the Munitions Board or NPA says they are essential to defense production.



1 Three boxes which will be assembled for a new Manhattan pier were built in this old clay pit beside the Hudson River. Concrete batching plant is at upper right.

Pier Floats D

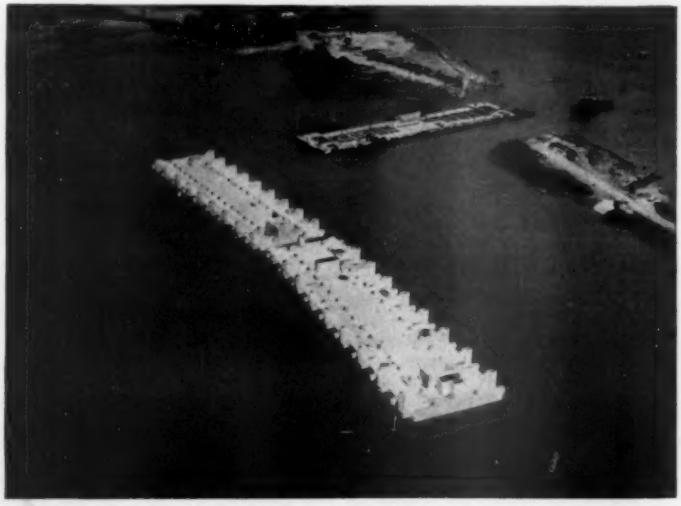
Last week a 13,500-ton concrete "ship" broke a speed record by sailing 38 mi. down the Hudson River, under tow, in 13 hr. Its builders had estimated the voyage at 38 hr. It was strictly a one-way trip, for the craft is one of three pontoon sections of new Pier 57 at 15th Street, North River, Manhattan (BW–Mar.29'52,p80).

Two more pontoons, each 27,000 tons, are ready to follow their smaller sister down the river from the former clay pit where they were built, between Haverstraw and Stony Point. They will make up the main length of the pier, extending 725 ft. into the river.

• **In Class by Itself**—The new pier has several unique features:

• The abandoned clay pit saved expensive drydock space. The "float and sink" idea came from World War II artificial harbors at Normandy.

• It has a basement inside each



2 One goes to sea, and that leaves two. The pit has now been flooded with 42 ft. of Hudson River water, and the first box is towed out through a gap cut in the shore.

3 Tugboat captains found the first seagoing box more manageable than they

Down to the Sea and Ships

pontoon, accessible by freight elevator from the main deck.

• Even when loaded with superstructures, the buoyancy of the pontoons will carry 90% of the deadweight.

• **Replaces Fire Victim**—The old Pier 57, also owned by the city and leased to the Grace Line, was a conventional steel frame structure on timber piles. It burned spectacularly in September, 1947, and was demolished two years later. The new pier has twice its floor area and storage space.

Emil H. Praeger of Madigan-Hyland, New York consulting engineers, drew on his wartime experience in designing a new fireproof pier. He had been a captain in the Navy's Civil Engineer Corps, working on pontoon design, and was familiar with the invasion-coast "float and sink" breakwaters.

• **Construction**—Merritt-Chapman & Scott Corp. and Corbetta Construction Co., both of New York City, won the construction contract at nearly $5.7-million. They took over the upriver clay pit, pumped out 350-million gal. of water in 20 days, leveled the pit bottom, and installed a drainage system to keep the hole dry.

Reinforcing steel, 5,300 tons of it, was preassembled at the site and swung into place by traveling cranes.

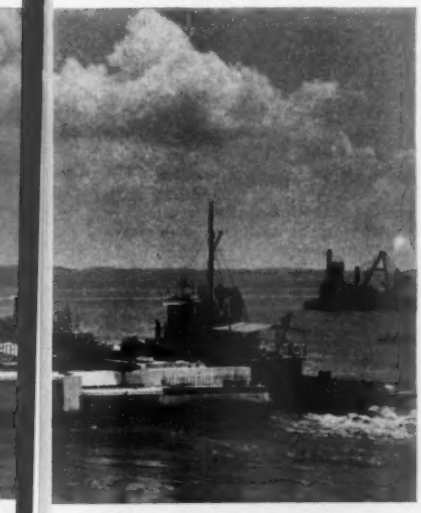
Before the first concrete was poured, a special compound was sprayed on the foundation, so that the pontoons wouldn't stick like a bride's cake when time came to float them.

• **Launching**—Engineers couldn't escape some nervous tension when that time came, after dredges had cleared a channel to the river. By all the laws of Archimedes and Euclid, the pontoons would float when a 30-in. pipe from the river was opened and the pit filled—yet there was just enough worry about it so the engineers joined the 2,000 lay spectators in a big cheer when the boxes did float. A gap was then cut through the dike.

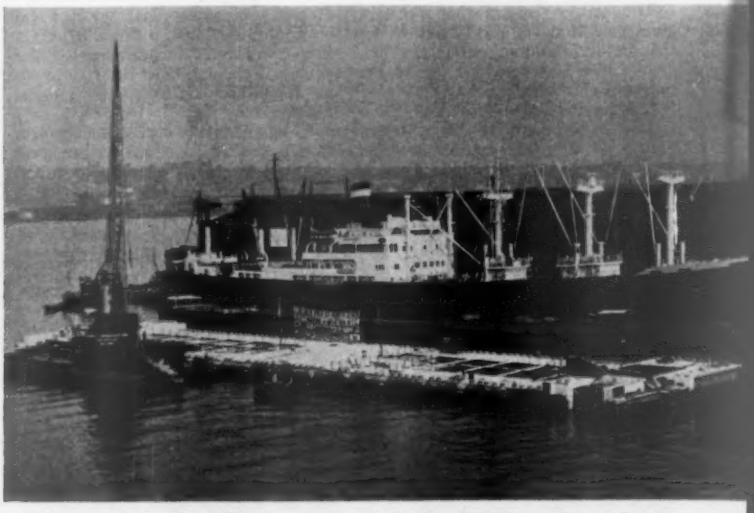
• **Sinking**—The trickiest part of the operation is to sink the pontoons precisely in place.

The 3,000 timber piles of old Pier 57 have been cut off 34 ft. below mean low water. They'll help carry the structure. Each box has to be sunk by flooding, then pinned in place by pile-driving crews. As the weight of the superstructure is added, the water ballast will be pumped out.

Precast, prestressed concrete girders 150 ft. long will be laid crosswise on the main pier pontoons. They'll span the 82-ft. pontoon width and cantilever out 34 ft. on each side. A two-story shed will be built on these girders, with a flat roof to store autos or light cargoes brought up by elevator.



had dreamed. In fact, not all the seven tugs were needed on the fast trip downriver.



4 At the pier site the bulkhead pontoon waits for favorable tide conditions. It had to be swung broadside to the shore and lowered into place on piles by flooding.

CADILLAC-BUILT tank is headed toward being the . . .

Best Tank in History—But . . .

. . . hundreds and hundreds of T-41's sit in warehouses and none have seen service. The reasons for that are a case study in peacetime mobilization.

Sixteen months ago, in March, 1951, the $43-million Cadillac tank plant in Cleveland produced, with some publicity, its first Walker Bulldog (T-41) 25-ton tank. About four months ago the plant reached its full scheduled output rate, dead on schedule. Exact production figures are a military secret, but the total number of tanks produced and turned over to Army Ordnance runs to many hundreds.

• **No Acceptance**—So far, however, not one of these tanks has seen service. Not one has been turned over by Ordnance to the user services. All of them are sitting in Ordnance warehouses, and it's not at all clear how much longer they will have to sit.

The reasons behind that situation are a case study in the sort of delays that plague a munitions-production program which isn't prodded on by the pressures of a total war.

• **Sighting Perfection**—Yet today, either in spite of or because of all the lack of pressure, the T-41 is getting close to its goal of being a top-flight fighting machine. Except for extremely minor changes, the shortcomings of the tank today are in its sighting mechanism for the gunner. One person on the project said: "It's not enough for the field services to be able to hit a man with the first shot at 1,000 yd. They want to be able to hit him in the eye."

That is almost literally what the problem comes down to in the T-41. In World War II tanks, sighting mechanisms caused an error of about a foot on a target 1,000 yds. away. The Army field forces want a higher standard than that on the T-41. Once they get it, the tank will probably be accepted by them.

• **History**—The big delay started right at the beginning of the project, early in 1950. It looked at the time as if the tanks might be needed soon. Thus everybody just had to forget the one to four years needed generally to design and test hand-made models. Bugs would have to be eliminated as production went ahead.

Since tanks were needed, Cadillac Tank began building them. All it had to go on was a fat contract from Ordnance (now totaling about $825-million) and some sketchy blueprints. As a result, the first tanks off the line were a miracle of speed but considerably less than that as a finished product—a myriad faults and weaknesses showed up right away.

• **100 Changes**—The transmission, for example, was an excellent one, and was an innovation. Like a Buick it used a torque converter for coupling to the engine. Yet more than 100 changes in its design and construction had to be made.

The horizontally opposed, air-cooled, six-cylinder supercharged engine was not quite as balky. Yet although it had been designed primarily for this tank, a dozen or so changes had to be made before it functioned to the point where field services found it satisfactory.

• **Better Tracks**—Next, the tracks turned out to be entirely too costly. They had to be redesigned to give better balance and strength, as well as to be more economically produced. Then they had to be redesigned again: Ordnance demands for interchangeable parts became a paramount issue. The result is that today the T-41 has tracks which function for from 3,000 to 5,000 mi. without replacement. The average distance life of a tank track in the last war was about 1,000 mi.

The final difficulty in the tank construction itself came in the armor. Originally, only cast steel armor was specified. The catch was that there just wasn't enough cast steel being made for this and other tank-building programs. So Ordnance switched to rolled steel armor plate. Not only did this prove just as satisfactory as cast steel; it also cost less. But in order to change over, Cadillac had to teach its young army of welders new techniques.

• **Effective Vehicle**—Today, everybody is satisfied that the T-41 coming off the production line is a highly effective fighting vehicle. Even the hard-to-please field services have no complaints on the vehicle proper. So the present holdup boils down to a complication of difficulties involving the turret and gun mechanisms.

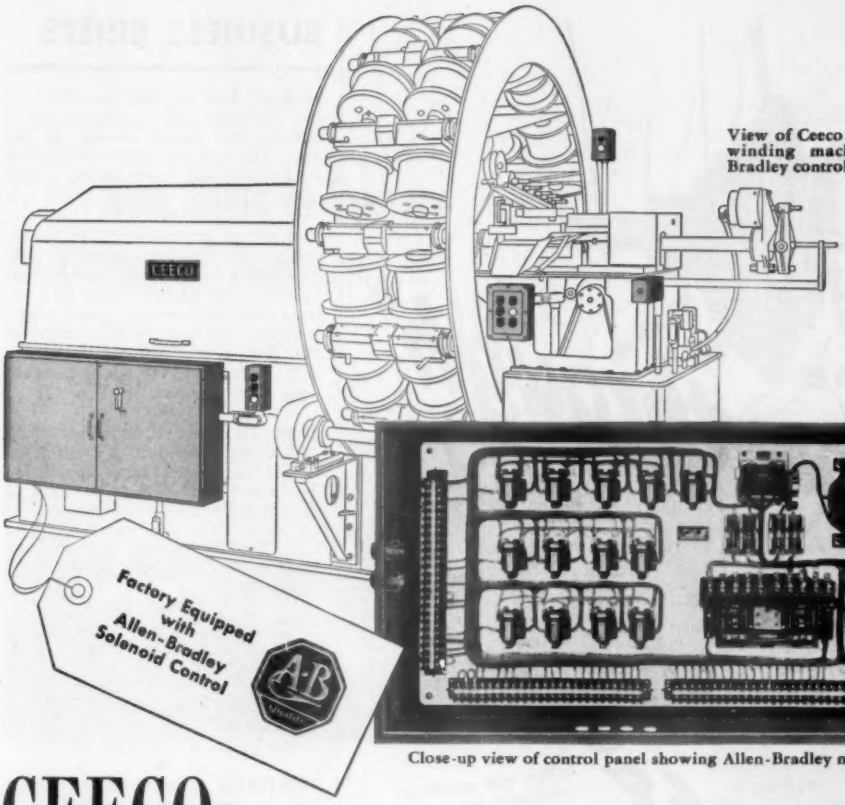
As early as Oct. 4, 1950, Cadillac could anticipate serious difficulties on that score. So complex was the mechanism that it was clear that only a long development period would bring about satisfactory operation. But design work wasn't completed until early 1951, so material for testing wasn't available as early as other tank components.

• **Improved System**—It was August of 1951 before enough of the material came through to permit large-scale testing. An improved system went into production in December of that year. And it is still being used, with some later modifications, in current production of vehicles.

The trouble now is that this mechanism is pretty expensive to produce, and is so complicated that it's hard to service. Since the fall of last year, development work has been going on to find a simplified design. The word from Cadillac is that prototypes show that a new system actually does have a simpler mechanism to manufacture and service. Moreover, it will be a more effective firing mechanism than the present model.

Ordnance did not request Cadillac to do the engineering work on the sighting mechanism now being improved. Instead, the work has been carried on by the Frankford Arsenal. But last month Cadillac asked that Ordnance assign engineering responsibility and authority for the mechanism to Cadillac. Ordnance is agreeable to the change, and the formal agreement is in the process of being set up.

• **Solution Soon**—Should Cadillac solve the problems in the firing mechanism as quickly as and as efficiently as they solved the faults discovered in the first vehicles produced, the way would be paved for early acceptance of the T-41 for field use. And when that time comes, all the changing and improving that has gone into the whole vehicle should make it the best tank of its kind in history.



View of Ceeco automatic armature winding machine with Allen-Bradley controls and push buttons.

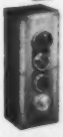
Close-up view of control panel showing Allen-Bradley motor controls.

CEECO AUTOMATIC ARMATURE WINDING MACHINE*

operated by Allen-Bradley Controls

Bulletin 709 Solenoid Starter.

Bulletin 700 Solenoid Relay.



Bulletin 800T Oiltight Push Button Station.

This automatic armature winding machine, designed and engineered by the Cleveland Electrical Equipment Co., Inc., automatically winds 28 coils simultaneously with perfect symmetry. The operation of this precision winding machine is controlled by Allen-Bradley motor controls.

Wherever there is a need for capital equipment which performs a better job technically and economically, you will find Allen-Bradley controls an integral part of such machines. Allen-Bradley controls have earned an enviable reputation throughout industry for their trouble free operation. Standardize on them, today.

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ALLEN-BRADLEY
SOLENOID MOTOR CONTROL

QUALITY

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"follow-through"
that counts
With peak work cycles becoming more crucial by the day throughout your operations, Twin Disc is all the more aware that *supplying* industry with high-performance Friction and Hydraulic Drives is only half the picture.
Today, it's the follow-through that counts—and Twin Disc assures that vital follow-through with the fastest, largest and most thorough Repair and Parts Service of any manufacturer of industrial friction and hydraulic drives.
68
To keep your equipment rolling, Twin Disc now has:
SIXTY Parts Stations and EIGHT Factory Branches, fully staffed by experts ready to provide efficient service and to train your own service crews;
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BUSINESS BRIEFS

Michigan Iron & Coke Co. will soon give Michigan and its auto industry a much-needed nearby source of pig iron. The new enterprise will build a $20-million mill south of St. Clair, Mich.

•

First aircraft carrier powered by atomic energy is a step closer to reality. The government has awarded a contract to Westinghouse Electric Corp. for work on a large-sized nuclear power plant. It follows the wake of Navy talk that the first nuclear-powered submarine (BW—Mar.8'52,p141) will be launched some time next year.

•

Muntz TV turned tail on industry trend by boosting prices of its TV sets 4.3% to 15.3%. . . . At the same time, Radio-Television Mfrs. Assn. asked Office of Price Stabilization to eliminate ceilings on all TV and radio sets and parts, claimed administrative savings could allow further price cuts (BW—Mar.22 '52,p30).

•

Tire price tags took another tumble last week as Goodyear announced its second truck-tire slash in six weeks (BW—Jun.21'51,p36); Firestone and Seiberling quickly followed. The reasons, say producers, are lower natural rubber prices—and sales slump.

•

Gulf Oil Co. tanker picked an unlucky spot to drop anchor, snagged a $3-million natural gas pipeline under water off Staten Is., New York (BW—May24, '51,p136). The pipe links Brooklyn, N. Y., with Transcontinental's main line from Hidalgo, Tex. Owners say the mishap may undo $2-million worth of work.

•

Railroad expansion calling for $300-million worth of new terminal and road facilities by January, 1954, has been mapped out by Defense Production Administration.

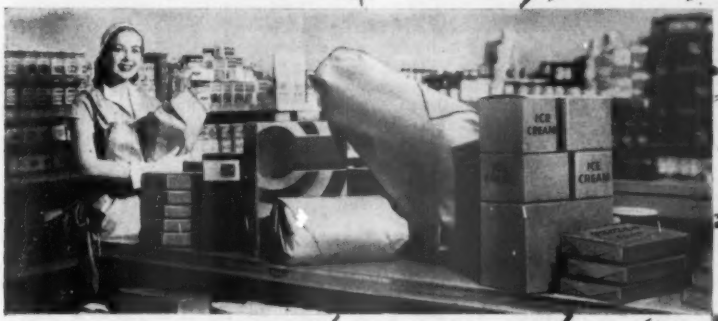
•

Claim-stakers tumbled through the brush on foot, dropped from the sky in planes, and paddled up in canoes as the gun went off for the first uranium rush in history last week above Lake Athabaska, Sask. By noon 120 claims were filed; officials count on 1,000 before the rush subsides.

•

Rio Grande Southern R.R., Colorado's historic Galloping Goose line got permission last week from a U.S. district court to abandon operations (BW—Feb.23'52,p134). The bankrupt road, the next-to-last Colorado narrow-gauge to go, has been in federal receivership since 1929.

Now, Paper is Primary In Dozens of New Uses...



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RCI

MARKETING

Air Conditioning: A Sell-Out in '52

● **Manufacturers lost a lot of sales this summer by setting production too low. They won't make the same mistake twice.**

● **Fastest gains are being chalked up in the home unit field, though commercial and industrial business draws the biggest money.**

● **For the distant future, new homes and year-round air conditioning should be the juicy market.**

A few years ago, air conditioning was something most people went to the movies to cool off in. This is the year when they carried it home—just about all of it they could lay their hands on.

Manufacturers were caught flat-footed. They had underestimated their 1952 market for home conditioners by as much as 30%. As Salvatore Giordano, president of Fedders-Quigan Corp., put it, they weren't ready for the avalanche. Since the market is seasonal and they couldn't accelerate production at a moment's notice, they just had to let a lot of buying dollars get away.

• **Sales—How Big?**—Actual sales figures for the industry are a trade secret. Government figures show a grand total in 1951 for both refrigerating and air conditioning equipment of some $327.5-million at factory level—or somewhat over $800-million at retail. However, Cloud Wampler, president of Carrier Corp., refers to air conditioning as a $1-billion business at the retail level in 1951 and predicts a $100-million increase in 1952. Others in the business feel his figure is too high.

Everyone agrees that all types of cooling equipment—from the smallest room unit to the largest installation—shared in the fun. The room air conditioner, smallest of the lot (from ¼ hp. to about 1 hp.), scored a smash hit. York Corp. had sold its entire line a month ago. Philco, which buys its units from York, reported a sell-out. Carrier Corp. and General Electric did the same. So did Fedders-Quigan. Frigidaire says the only thing that limits sales is production.

Newcomers in the field fared as well. Radio Corp. of America moved into the market this spring (BW-Mar.29'52, p40) and sold out all it could lay its hands on. Crosley, which like RCA is supplied by Fedders-Quigan, started on room units for the first time with 16,000 of them, sold them all in two weeks.

Westinghouse doesn't make room air-conditioners. But sales of its bigger self-contained units, of 2 hp. through 7½ hp., for offices and larger residential space, in the first six months of 1952 ran 42% ahead of any previous period. The company was rejiggering its employees' vacation schedules to keep up with demand.

• **Large Economy Size**—For the long term, perhaps the most significant development is that year-round installations for cooling entire houses also gained. All companies in the field (BW—Feb.2'52,p21) did well. Servel reported substantial increases in its single-unit and cooler. GE did too. Carrier reported that it's out of stock on its central installation.

The heat that blistered the nation was the big factor in zooming the market. Long range weather forecasters are retained by manufacturers. But it isn't known whether the forecasters were off this year or the manufacturers wouldn't rely on them. But some observers think the spurt would have come anyhow.

It underscored a shift in the old pattern of appliance selling.

• **Quick Take**—It used to be that a new appliance would take 10 to 20 years to find a million customers. Electrical Merchandising, a McGraw-Hill publication, reports that it took some 18 years to sell a million electric refrigerators, about 12 years to sell a million electric ranges. Electric clothes washers took about 10. Radio was an outstanding exception: It leaped to a million in three years.

Since the war, the pace has stepped up. Electric and gas clothes dryers reached their millionth sale after only five years. Freezers did it in three years.

Room air conditioners, a baby in the 50-year-old air conditioning family, advanced more slowly at first. Since 1947, the first year in which Electrical Merchandising kept score on room units, 660,900 have been sold. By their count, 337,500 homes had such units at the first of this year. But Wampler said last week that 500,000 homes should have air conditioners by the end of this year. Counting in sales to offices as well as homes, he estimates the industry will ship its millionth room air conditioner by yearend.

Apparently people accept such equipment more quickly today. They move new appliances faster from the wonder category to a necessity in a stepped-up scale of living.

• **Production Cramped**—Manufacturers have known about the speed of public acceptance. But they deliberately set their sights low on air conditioning for this year. Materials shortages held back some. But mainly they were worried about the 62,000 unsold units left in distributors' hands from 1951. Since they shipped only 237,490 room units last year, according to government figures (though this is some 20,000 low by the reckoning of the Air Conditioning & Refrigerating Machinery Assn.), they were scared to go overboard on production.

Next year, most of them plan it differently—though they admit with a wince that a cool summer might prove their undoing. Most production schedules will be stepped up, if the materials supply permits. Fedders-Quigan hopes to double its output by next summer. Crosley is thinking in terms of perhaps 75% to 100% more. Philco lets it go at "increased" production. Servel forecasts an increase in its year-round equipment; GE will considerably boost its "match mates" for heating and cooling. York feels business will be at least as good as this year. Carrier thinks a 50% increase in sales is a reasonable bet.

• **Tail Wags Dog**—The home market is still pretty small potatoes compared with the big commercial and industrial installations.

Carrier reckons that today less than 10% of its total dollar volume is for home use. But a couple of years ago it was less than 1%.

F. J. Van Poppelen, general manager of GE's air conditioning division, guesses that within 10 years more dollars will be spent for home air conditioning than for all commercial and industrial units. The July, 1952, issue of Plumbing & Heating, a trade publication, predicts that within five years 1.6-million U. S. homes will have either partial or complete air conditioning.

The industry is more or less unani-

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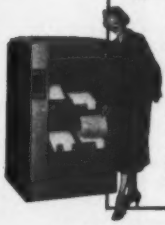

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mous that in home conditioning it has a big bull market by the tail. They aren't so unanimous about whether the future lies in room units or complete air conditioning.

• **All-Weather Trend**—Year-round conditioning is already gaining ground. A GE official estimates that 3% of the privately financed homes built in 1952 will have year-round units. Next year he believes the percentage will run a lot higher.

The chief question is: How much are people willing to pay to be comfortable? A Servel spokesman says that for the average seven-room house, built around air conditioning, it costs about $2,000 to buy and install a year-round heating and cooling unit—$500 more than the cost of the heating equipment alone. Plumbing & Heating estimates that a combined warm-air heater and cooler using common ducts costs $600 to $1,000 more for a six room house than a conventional heating system. Servel points out, however, that to add separate room units—at $200 to $400 apiece—in a seven-room house would cost more than the central unit.

• **Room for Both**—The general thinking is that there's a big market for both types of conditioning. The cost of installing central units in old houses is prohibitive for many pocketbooks, unless the house has warm-air ducts. However, the room air conditioner is feasible.

On the other hand, as builders become more aware of air conditioning as a sales gimmick, they will go increasingly for original installations. This gets around one difficulty, the fact that many buildings today are not wired to take care of the additional load.

• **New Market**—The new home market, especially the mass-produced homes of merchant builders, is what manufacturers are eying hungrily and hopefully. The biggest potential may lie in the house that sells for more than $16,000. But even now builders have projects for putting air conditioning into homes to sell as low as $9,000, and even $7,000.

Heavier promotion is in the cards for most manufacturers. Fedders-Quigan, for example, expects to spend $1-million on advertising next year. Others are going all-out to catch both the builder and the housewife.

Improved models are further sales bait. Fedders-Quigan is already test-marketing a room cooler that will also provide supplementary heat for a room; it will be on the market next year. York is supposed to have a similar unit up its sleeve.

It's significant that the low-priced market is attracting manufacturers. Carrier plans an installation for the home. Servel will go into room units for the first time.

THE MARKETING PATTERN

NATIONAL SALES EXECUTIVES, Inc., has very sensibly taken up cudgels on behalf of sales planning. The national organization is starting a campaign to get every company in the U. S. to plan now for post-mobilization markets. It argues that "the basic key to our future and to the future of the free world is not how much can be produced but how much can be sold."

NSE's crusade couldn't have come at a better time.

A few months ago everyone had keyed himself up to the "hard sell" (BW—Mar.15'52,p22). But now, thanks to the recent steel strike, there's danger of a letdown. Shortages following the strike are bound to bring back sellers' markets in cars, some appliances, various other hard goods (BW—Aug.2'52,p17). This, in turn, may produce some complacency among sales managers.

NSE's campaign should remind people that the steel strike can only delay our return to competitive markets. At the most it will stretch out the stretchout.

THERE ARE TWO FACETS to NSE's program. The first is a booklet called the "NSE Planning Guide."

The booklet is aimed at the small man who doesn't have marketing research staffs or economists at his beck and call. It's a down-to-earth textbook showing, step by step, how to ask yourself the right questions about your distribution setup, how to set up sales programs, how to go about making changes, how to plan your markets.

In general, NSE's outlook is optimistic. The book quotes a number of sources to show that we are entering "the greatest era of prosperity we have ever known—with the highest standard of living yet seen."

NSE shows the part that the businessman can play in this upward surge:

"Only the salesman and his selling aids of advertising and merchandising permit the miracle of mass-production to mean so much to our economy. Unfortunately, businessmen can no longer guess their way through problems. Planning — better planning — advance planning must be done now if we are to survive."

NSE IS AWARE, however, that planning can be no better than the data on which it rests. So it is trying to do something about the biggest roadblock in this area—the lag in good sales figures.

Except for figures on department stores, government sales figures come out too late to be of more than historical interest to manufacturers and retailers. What they need are last month's figures now—not several months from now, when they are too late to influence manufacturing, inventory, advertising policies.

As the second facet of its program, therefore, NSE wants to break this bottleneck by building up a rapid collection service for sales figures at the manufacturing, wholesaler, and retail levels. It has been working with a research organization to this end and has arrived at some tentative estimates. NSE says that to work out such a service for 103 industries—supplying monthly sales figures no more than three weeks late—would cost about $6-million a year.

NEED FOR this kind of service has been driven home by the events of the past two years. Two short, sharp buying booms right after Korea were followed by two sharp—but not so short—inventory gluts. Fast, accurate reporting of sales figures might have cut some of the losses.

But there's a question whether or not some businessmen will see the point.

On one hand you have the radio and TV industry, which has banded together to supply thorough and rapid sales figures. On the other hand you have the experience of one of the Federal Reserve banks, which recently tried to collect figures on farm implement sales in its district. It called all the farm implement dealers together, reminded them of the competitive advantages of having total sales figures for the district. But the dealers couldn't see it. Business was good. What use were figures?

That was a free offer. NSE may find the going even stickier on a pay basis.

He's a baby sitter for barrels

Up and down the great stacks of whiskey barrels that stretch for miles through the warehouse, trouble-shooters make their rounds.

They are the special teams that constantly patrol every foot of Schenley's vast warehouses, making certain that all is well. Barrels all tight and sound. Surroundings spotless and dry. "Climate" just right for slow, aging of the sleeping whiskey.

Their hunt doesn't often turn up trouble. You see, the barrels are sturdy and solid, because Schenley makes its own to insure their quality. And the warehouse air is kept warm, clean and fresh, the way whiskey likes it.

Still, the trouble-shooters keep a constant watch, "just in case." Babying barrels is extra effort, maybe, but an important part of the complete network of quality controls which guard Schenley whiskies from the time the grain is grown until—years later—the whiskey is in your glass.

This is Schenley's way of making certain that you get the utmost enjoyment in every drop of every drink. *Schenley Distillers, Inc., New York, N. Y.*

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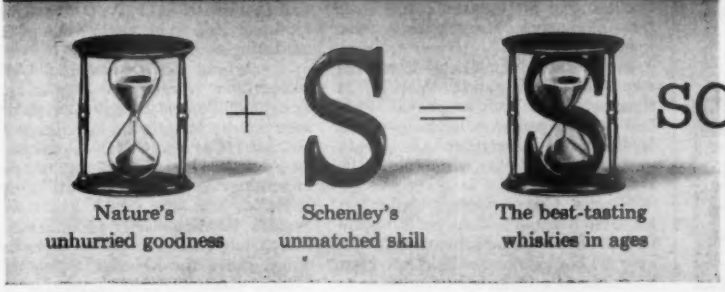

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JOHN GREIG expects to be trail-breaker in the UHF band. At Reading, Pa., his . . .

Ultra High Frequency:

When the Federal Communications Commission lifted the ban on new television stations, it expected that the stampede would be for channels in the very high frequency (VHF), and that the unpioneered ultra high frequency (UHF) channels would go begging. But by July 1, when the commission began handing out permits for new stations, 200 of the 500 applications filed were for UHF (BW—Jul.19'52,p29).

Some experts in the field explain that, in spite of skepticism about the new band, telecasters are so eager to get the jump on competitors that they choose the easier-to-get UHF. Others claim that ultra high frequency is where the future of the industry lies: There's less interference, fewer ghosts, more room.

In any case, John Greig—46-year-old owner of radio station WHUM in Reading, Pa.—is ready to gamble $650,000 or more on what he believes will be the first UHF station. Greig optimistically expects to be on the air by Dec. 1.

• **Charted Course**—Greig's application for UHF Channel 61 so far is uncontested. Even though he doesn't yet have FCC's go-ahead, Greig has what he thinks is a foolproof setup:

• A market comparable in size to some of the largest TV areas in the country, covering a population of 2.7-million, compared with Boston's 3-million.

• A ready-made audience. Some 40,000 VHF receivers in the area are already hooked onto community antennas. They will be able to bring in WHUM-TV on one of the VHF channels now unused on their sets by transforming that frequency.

• A combination tower-transmitter that will give WHUM (1) an antenna almost twice as high as those atop New York's Empire State Building, and (2) unique transmitting equipment that promises to push WHUM's signal loud and clear right to the edge of its marketing area.

• A head start on potential UHF competition. Almost 18 months ago, Greig sold General Electric Co. on the idea that he had all the ingredients to make WHUM a real UHF "showcase." So General Electric agreed to put everything it had on UHF into WHUM.

• **GE's Klystron**—GE had something that Greig wanted, too—a technical gadget called the Klystron, which will create a powerful UHF signal. No ex-

STATION WHUM-TV will telecast over a radius of 62 miles, serve 100,000 set owners.

The Promised Land of TV?

isting transmitting tube will do the job. Greig figured that such a gadget would be required to put UHF-TV over without a really high-powered signal.

While the Klystron and WHUM's unique transmitting facilities are undoubtedly the keys to WHUM's future success or flop, the Klystron hasn't yet been field-tested. But Greig has poured at least $118,000 into this equipment. Then there's an additional $175,000 for a new-fashioned helical antenna and a 1,050-ft. tower.

• **Altitude**—Greig says he could have saved plenty by settling for a shorter tower—but height is crucial in his planning. By putting his tower on top of a mountain he gets WHUM's TV antenna about 2,680 ft. in the air—nearly twice as high as the antenna atop the Empire State Building.

This obsession with antenna height results from some peculiarities of putting out the new UHF signal. By doubling the height of the antenna tower, you can reduce the amount of power required at the transmitter to one-fifth. With such an operation, WHUM-TV will be able to telecast within a radius of 62 miles, serving 750,000 families in an area of 2.7-million. Greig estimates that his 261,000 watts of power will cost about $10,000 per year.

• **Black Ink**—Greig expects to operate in the black from the very beginning. He estimates that on "UHF-Day" there will be 100,000 set owners able to tune in on his station. Of these, he says, 75,000 will either have new UHF receivers (soon to be on the market), or VHF sets converted to receive the WHUM signal.

Where the remaining 25,000 set owners originate is an interesting development in UHF television. There are some 40,000 set owners within the WHUM area who are tuned in to comparatively remote TV stations via community antennas. These owners pay a fixed fee per month for closed-circuit connections with the community antennas. When WHUM-TV goes on the air, these antennas will convert the UHF signal to VHF to enable their customers to receive WHUM-TV without having to alter their sets at all.

For a while, at least, Greig will have something of a monopoly on high-power UHF. He has the only Klystron built for the market, and GE plans to hand-build 10 more before it sets up a production line.

PRC tapes feature natural anti-deterioration and rattle cushioning values. Special impregnations also provide unmatched *protective sealing* characteristics. FOR EXAMPLE:

CHROME LOCK
This product inhibits electrolysis and corrosion. Is also anti-wicking. Seals under pressure. Adhesive back is pressure sensitive. TYPICAL SEALING APPLICATIONS: Instruments; glazing channel window sash; skin laps on bus bodies; weatherseal for trailercoaches.

KLING FELT
Features a new, solvent-activated adhesive (one side only) that sticks to all surfaces. Can be applied to cold metal. WON'T PULL LOOSE!

TYPICAL APPLICATIONS: Weather Strip for windows, doors, etc.; dust and moisture seal for electric control panels; rattle cushioner.

PRE-SEGMENTED
PRC tapes can be supplied in segmented rolls according to order. Each segment is pre-cut to a sufficient depth to permit easy detaching. Ideal for volume application of equal-size pieces.

Write for free test sample and new engineering folder—TF-18

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PRODUCTS RESEARCH CO.
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Representatives in All Principal Cities

Pledge to Reform

. . . in lieu of cease-and-desist orders in price discrimination cases is being considered by FTC.

When the Federal Trade Commission charges a company with unlawful price discrimination between customers, it doesn't do the company any good to promise to mend its ways. The commission keeps on prosecuting anyway—formal trial, cease-and-desist order, and all. Now there's a move on in FTC to change that policy, allow for voluntary settlement.

The question has come up in the case of Wildroot Co., Inc., toiletry manufacturer of Buffalo, N. Y. The company abandoned the practices charged in a complaint by the commission, then asked for its dismissal. This request has been overruled by the trial examiner. His reason: Commission policy bars voluntary settlement of cases involving alleged violation of the Clayton anti-trust act, as amended by the Robinson-Patman Act forbidding discrimination in prices.

• **Under Fire**—Voluntary settlement is permitted by the commission in many cases involving unfair or deceptive practices. Denial of this opportunity to Clayton Act offenders has been under fire for some time. Criticism has come both from within the commission and from the outside.

Opening the door to voluntary compliance in such cases is by no means certain even now, but the issue is being brought to a head by the commission's Division of Trade Practice Conferences. This division has proposed that voluntary settlement be permitted in Clayton act cases when a firm is willing either (1) to agree, by stipulation, to refrain in future from the prohibited practices, or (2) to subscribe to industrywide trade practice rules where such rules have been issued by the commission.

In the Wildroot case, the company subscribed to a trade practice code for the cosmetic and toilet preparations industry that was issued by the commission just a month after it had brought its complaint against the toiletry company.

• **Opponents**—There has been a turnover in the commission's staff during the past couple of years, and this may favor the voluntary settlement proposal. But the idea doesn't have unanimous support. It's opposed by William T. Kelley, the commission's general counsel, and by the Division of Investigation and Litigation.

This contingent of the commission's staff contends that a pledge by violators to refrain from further wrongdoing isn't enough. They regard an order to cease and desist, as the most effective weapon the commission has, because the cease-and-desist order operates with the effect as an injunction.

MARKETING BRIEFS

Appliance cheer: Crosley refrigerator sales for June were 320% ahead of the same month in 1951; radio and TV sales were nearly four times over Crosley's biggest June. Philco is sold out on refrigerators. Servel looks for biggest third-quarter output in recent years. And the steel strike trimmed down inventories. General Electric now looks for temporary shortages in some lines.

■

RCA Victor will have a longer-playing 45-rpm. record on the market by mid-August. The 45-E.P. (extended play) is the same size as the regular 45 disc, but will use more of the record surface. It can play up to eight minutes a side.

•

About 27.5-million cars in the U. S. have radios, says Broadcast Advertising Bureau, compared with only 7.5-million in 1946. A Pulse survey shows that 70.5% of the U. S. cars, 92.4% of post-war cars, are radio-equipped.

•

Carson Pirie Scott is the last of Chicago's big State Street stores to succumb to the lure of the suburbs. It will open a branch in the new Evergreen Park shopping center.

•

Stromberg-Carlson put an end to dealers' griping that TV makers put out too many new models. The set-maker announced it will confine itself to one new line a year. Now it is trying to quiet a second complaint—that margins are too low on TV sets. It has just upped the dealer margin by 5%.

•

Another brewer—Cleveland's Brewing Corp. of America—has an eye on the big New York market. The company's output of Carling's Red Top Ale and Black Label Beer has risen from 360,000 bbl. in 1949 to an estimated 860,000 this year. Forthcoming expansion will cost the company $3-million to $10-million.

•

The Pentagon is looking over advertising agencies. The Army has an appropriation of $1-million for an advertising campaign to recruit nurses and other personnel. This is the first money it has had for this purpose since Congress cut it out a few years ago.

How comfortable should an executive's chair be?

Let's consider this very popular Sturgis chair, the No. 1805 Senior Spring-Rest. The seat has a thick cushion of foam rubber on coil springs. The spring back is thickly cushioned with foam rubber. The armrests are cushioned with foam rubber. Sound luxurious? It *is* luxurious.

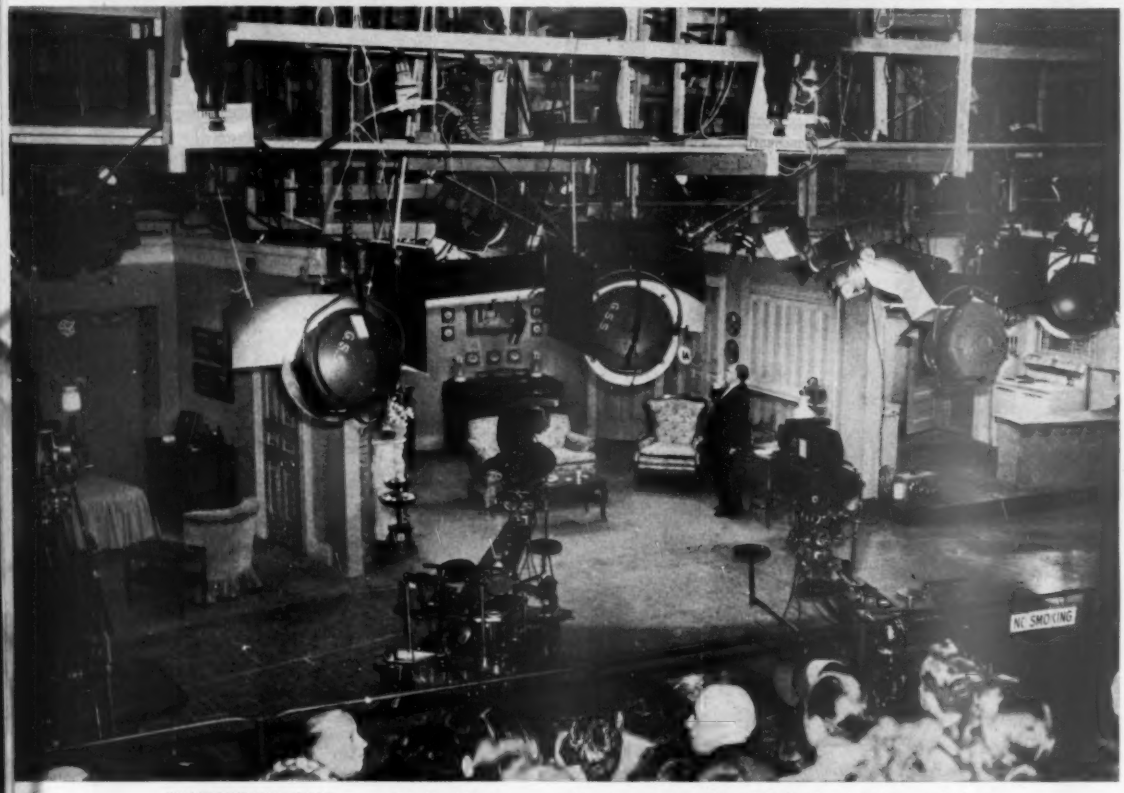
But—and here's the business-like point—it's luxury under control. For here is no chair to loll in. *Relax* in, yes. *Slump* in, no. This is a chair that has been designed and engineered to keep you in your place, to encourage the posture that discourages fatigue. In short, here's a chair that's good for you, *even though it lets you sit in the lap of luxury* at a general admission price.*

P.S. ****Let your Sturgis dealer surprise you with the low price of this Sturgis chair.***

Sturgis
POSTURE CHAIRS
The Sturgis Posture Chair Company
Sturgis, Michigan

Sturgis chairs are engineered for keeps.

You can't see all the quality that's engineered into a Sturgis chair but it's there in full measure—and because it's there a Sturgis chair is a long term investment in office comfort and efficiency. Today the finest executive, secretarial, clerical, guest and institutional metal chairs are being produced by The Sturgis Posture Chair Company, Sturgis, Michigan.



TV PRODUCTIONS are paying the bills in more and more movie studios. It's the first step in a revolution as . . .

Hollywood Learns How to Live with TV

Movie makers see visions of a new heyday for the motion picture industry. But they may have to make a choice —between their theater customers and television.

When television started moving into U.S. living rooms, Hollywood got an acute—and justifiable—case of jitters. Movie-house attendance was already headed downstream; production and labor costs were spiralling. As far as the movie makers could see, there was only one way to meet the new threat: Make bigger and better pictures, slash costs, step up the old ballyhoo.

Now, still reluctant, the movie capital is changing its tune. More and more studios are seeing their bread buttered with TV and are quietly going into the business of producing films for television. It's predicted that by fall all the majors will have some TV tieup.

There are still the spoofers, the holdouts. And the movie makers who are flirting with the bogeyman are feeling their way very cautiously. But it's getting clearer that the very success of the new medium could mean a very bright future for the film industry production-wise. Eventually studios may even have to make a choice: produce for theaters or make films for television.

I. The Dark Side

To get an idea of the major revolution TV is brewing on the Coast you have to keep one thing in mind. The motion picture industry is made up of two distinct parts—theaters and production-distribution. Today these elements are headed in opposite directions.

• **End of the Queues**—The picture for the movie houses is not a happy one. Box-office receipts have slipped approximately $250-million below the 1946 record of over $1¼-billion. Movie theaters are closing right and left; industry men predict they'll keep on closing until there are at least 5,000 fewer houses than there were in 1947, when the total was 23,000.

There's no doubt that television has bitten a huge chunk out of the box-office. There is one shining exception —the highly successful drive-in theater.

• **Plugging the Hole**—In 1946 there were just a few open-air movies. Today there are more than 3,000. They

TV BOOM has made studio space so scarce that CBS is building its own facilities for putting live shows on film.

account for about 20% of gross theater receipts. According to Eric Johnston, president of the Motion Picture Assn. of America, the drive-ins more than make up for the total of seats lost through the closedown of theaters.

• **The Problem**—Despite the depressed state of the domestic market, theater admissions sold every week might still run close to 55-million, Johnston points out. That's a far cry from the popular propaganda figure of 95-million the industry bandied around in its heyday of 1946-1947. But it's still many times more than the other spectator amusements pull in together, says Johnston.

The industry's biggest problem as far as theaters are concerned is to bring its sights down to the new levels. To do that, Hollywood will have to slice costs even more than it has already. If it can, the movie industry is confident it can make do with the combination of the improved market and whatever remains of the domestic take.

II. The Silver Lining

There is no doubt that television has firmly entrenched itself in the movie-industry camp. The real impact, however, is being felt by the production-distribution end of the business.

Right now television is chewing up hundreds of old pictures. When TV really gets rolling, it is expected to consume film 20 times faster than theaters do now.

• **New Market**—Television has obviously given Hollywood a vast new market for its feature pictures. But video people are even more anxious to get films specially tailored for the new medium.

Already, half of all TV shows are on film; the industry expects that ultimately maybe as much as 80% will be canned, or filmed. That means that the studios making film for TV are churning out more film than the major studios are making for theater distribution.

• **Boom!**—There's no doubt about it. Makers of film for television are riding the crest of a boom. And the film-for-television business, which Variety estimates at $20-million a year, is attracting more big-name stars. Singer Sewing Machine, for instance, is going to pay $1¼-million for 26 TV films starring Charles Boyer, Dick Powell, and Joel McCrae.

There are probably 25 to 30 solid producers of TV film, or telepix, in Hollywood today.

Most of them are pretty well set up, with a great intermingling of people from radio and films. Some of the biggest, such as Ziv, grew out of the radio transcription business; another big one, Hal Roach, sprang from the ranks of the Hollywood producers.

• **New Breed**—Roughly, there are two classes of producers. First come the independents. They rent space and equipment at rental studios. They buy a story and hire the talent.

The second type takes in the producers who have set up miniature but complete studios and who own their studios and equipment.

• **The Big Five**—Where do the major studios fit into the picture?

So far, the major studios have stayed more or less aloof from actual production, adopting a stance of watchful waiting. In some ways this makes sense. The people who are already making film for TV are veteran motion picture people. On some techniques they are way out in front. Furthermore, with present overhead and labor costs, the majors probably can't make shorts for commercial sponsorship profitable now. They will have to slash costs first.

• **Watching**—Hollywood's big five producers—Metro, Paramount, 20th Century-Fox, RKO, and Warner Bros.—are among the watchful waiters. Nicholas M. Schenck, president of Loew's, Inc., parent company of Metro, pointed out last week that Metro was one of the last to go into talking pictures. He implied that Metro had let other studios make the mistakes first. He said the same would be true of telepix. This clearly indicates that it's only a matter of time.

• **Clean Split**—You hear talk that come fall most major studios will be split down the middle, with separate producing companies—one making films for TV, the other producing for theater distribution. These four studios have already set up subsidiaries to grind out TV fare:

• Columbia's subsidiary, Screen Gems, caused a stir recently when it entered into a contract with Ford Motor Co. to make 39 half-hour dramas for Ford Theater. Ford will pay about 75% of the $25,000 cost of each film for the right to two showings in each television market. Columbia hopes to to get the rest of the cost, and its profit, from showings and sales in later TV markets.

The Ford deal is a good indication of how cautiously the studios are treading. It's said to be the first time a major studio has dealt directly with a commercial sponsor. In the past, studios have made film for TV on speculation.

• Universal-International's subsidiary, United World Films, is producing a number of TV series, but none has been sold for sponsorship yet.

Milton R. Rackmil, president of Universal and the one who spearheaded the studio's move into TV, is also head of Decca Records, which bought a majority interest in Universal a year ago. Rackmil will use Decca's nationwide distribution setup to handle Universal's television films.

• Monogram's subsidiary, Inter-

"They're the nuts for flush fastening"

They're United-Carr's pallet TEENUTS, for heavy warehouse and stevedore pallets. They're tightened with a hollow-ended Allen wrench which allows overlong bolts to protrude from the thread section into the driving section. This ensures flush fastening regardless of variations in deck board and stringer thickness. These TEENUTS have a special, vibration-proof self-locking feature.

With TEENUTS in over 600 different types and sizes . . . and thousands of other specialized fasteners and allied devices, United-Carr helps speed assembly and improve product performance for the nation's leading manufacturers . . . in the woodworking field, and in the automotive, electronics, aviation, and appliance industries, too. If you have a fastening problem that requires volume production facilities, check first with United-Carr—FIRST IN FASTENERS.

Before bidding on government contracts requiring snap fasteners or special fastening devices, consult your nearest United-Carr field engineer.

UNITED-CARR

United-Carr Fastener Corp., Cambridge 42, Mass.

MAKERS OF DOT FASTENERS

". . . the first time a major studio has dealt directly with a sponsor . . ."

INDUSTRY starts on p. 46

state Television, is filming the Ethel Barrymore Television Theater, but hasn't sold a sponsor.

• Republic's Hollywood Television Films, Inc., started producing a Commander Cody series but stopped a couple of weeks ago. Republic said the unions were causing such problems that the studio would rather keep out of the business temporarily than serve as pathbreaker for the whole industry.

• **Free Choice**—It's true that the unions have been a big stumbling block to the whole business of the studios entering the TV film field. Neither the labor groups nor the producers want to see any precedents set at this stage that might leave them behind the economic eight-ball when the business really gets rolling.

Undoubtedly, however, there is more than that behind Republic's decision to drop TV for the time being. It points up the big problem that all companies will face eventually—more or less to make a choice between theater customers and television. That is one reason why the studios have carefully confined their television activity to definitely separated subsidiaries. And it's one reason the big five have kept out of TV almost altogether up to now.

III. Which Direction?

There's still another reason for the majors' coolness toward TV. Wise heads around Hollywood are betting that the big five are husbanding their strength, getting ready to smother the market for two important experimental developments—large-screen theater TV and subscription, or pay-as-you-see, television.

Large-screen is an attempt to counter the attraction of home television; pay-as-you-see is Hollywood's effort to find a box office in TV. If subscription television succeeds it would mean a crippling blow to the theaters, since TV would be able to pay more for feature pictures than theaters would. There's no doubt which direction producers would take then.

• **Remains to Be Seen**—There is considerable doubt that large-screen television will mean very much to theaters, once the novelty wears off. Twentieth Century-Fox aroused new interest in theater television by demonstrating the possibility of large-screen color theater TV. It acquired United States rights and part of the world rights to a Swiss system known as Eidophor, which it combined with CBS' sequential system.

The big question remains: What advantage is there in seeing a TV show thrown on the screen over a well-made Hollywood production shown on the same screen?

• **Where Profit Lies**—Pay-as-you-see devices offer Hollywood a much greater potential. Three principal methods are being tried out now.

• Phonevision. Zenith's system uses a signal that comes in over the telephone wires to unscramble the broadcast picture. You pay the phone company for the shows you see, along with your telephone bill. It was tested among 300 subscribers in Chicago and was said to be a success technically and economically.

• Subscribervision. Skiatron's version hasn't been publicly demonstrated but works without phone lines. A punch card is inserted in a box attached to the set. It permits the viewer to see unscrambled on his screen shows for which the card has previously been punched.

• Telemeter. Paramount recently acquired a 50% interest in this system for $350,000. The key is a coin-in-the-slot arrangement that permits the home set to bring in the picture. At the end of the month the boxes are collected and an electronic tape indicates what shows the viewer has seen.

• **Up to FCC**—While Telemeter does not require phone lines it does need its own channel or temporary use of an already-established channel on a rental basis.

No approach has been made to Federal Communications Commission as yet; Paramount intends to ask for permission to rent channels. But hearings on subscription TV probably won't begin until next spring.

• **Favorably Inclined**—Indications are that only FCC can stop pay-as-you-see TV in some form or another. A lot of questions will have to be answered, but the commission is said to be favorably inclined toward it.

If FCC does go along, Hollywood may be more fabulously profitable than it ever has been.

• **Ruffled Feathers**—In addition, there is no reason the same picture couldn't be used in both theaters and television. Paramount, in fact, is thinking of letting the exhibitor in each town be its franchise holder for sale and servicing of the Telemeter equipment—a clever device that would beat down the opposition Paramount would have from theater men.

In general, local exhibitors get really burned up at the sale of features to TV. They take a more philosophic view of the specially made telepix, however, as long as the best box office stars are not used. They realize that Hollywood must eventually get into television.

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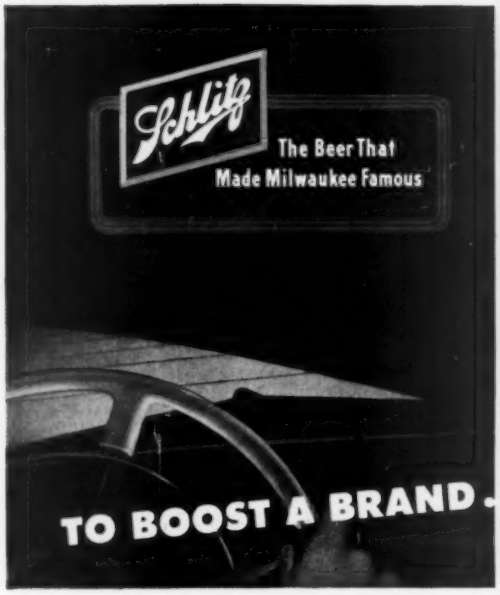

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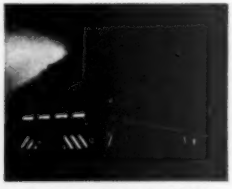
American business has a job to do, telling and selling the story of its products to an ever-expanding market. It's a BIG job—getting bigger and more important every day.

That's why market-wise businessmen turn to "SCOTCHLITE" Sheeting for better looking, harder-hitting outdoor campaigns. They know signs made of this brilliant reflective material reach *more* people, sell harder than any other outdoor medium.

And signs made with "SCOTCHLITE" Sheeting work right around the clock! At night when ordinary signs go "out of business", these reflectorized signs still command attention—lit up in full-color brilliance by the headlights of every passing car.

So, whether you are boosting your products through outdoor advertising—or blazing a superhighway for maximum safety and beauty, you'll do it better with "SCOTCHLITE" Sheeting!

OUTDOOR ADVERTISING is a *better buy* when reflectorized with "SCOTCHLITE" Sheeting; delivers dramatic impact in true color. Packs a greater sales wallop!



THIS DIESEL LOCOMOTIVE has brilliant markings of reflective sheeting for greater nighttime visibility. Colorful striping adds to appearance of equipment, too.

REFLECTORIZED TRUCK EMBLEMS do a double job; prevent costly rear-end collisions, give you free advertising that SELLS, on the finest possible position.

TRADE-MARKS for store fronts, point-of-purchase signs reproduce perfectly in colorful reflective sheeting, offer full day-and-night visibility.

"How to Sell 24 Hours a Day"

A handbook for executives

WRITE TODAY for booklet telling how to double the SELL of your outdoor advertising . . . provide greater safety and improved public relations through signs made with "SCOTCHLITE" Sheeting.

USE THE HANDY COUPON

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Please send me booklet *"How to Sell 24-hours a Day"*

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Company .....

Address .....

City ..... State ..... Zone .....

Who uses signs of "SCOTCHLITE" Sheeting?

Across America, advertisers—and those responsible for public safety—are increasing the effectiveness of their outdoor messages with this powerful telling and selling medium . . . here are a few:

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Admiral
Ford
Dutch Boy Paints
Hamm's Beer
Standard Oil
Manhattan Coffee

RAILROADS

Great Northern
Northern Pacific
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The Milwaukee Road

FLEET OPERATORS

Navajo
P. I. E.
Texaco
Missouri-Pacific
Schlitz Beer
Greyhound Bus

HIGHWAY SAFETY

In every state of the union safety signs of "SCOTCHLITE" Sheeting provide a warning message, instantly visible 24-hours a day!

Latest trend in highway signing is the use of vivid *color-keyed* signs for:

Highway Route Markers
Turnpike Signs
Park Trail Blazers
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• • • •

Who sells signs of "SCOTCHLITE" Sheeting?

Your local sign man will be glad to tell you about signs made with "SCOTCHLITE" Sheeting. For his name—and for FREE booklet, "How to Sell 24-hours a Day", write today to Minnesota Mining & Mfg. Co., Dept. BW-82, St. Paul 6, Minn. Use the handy coupon.

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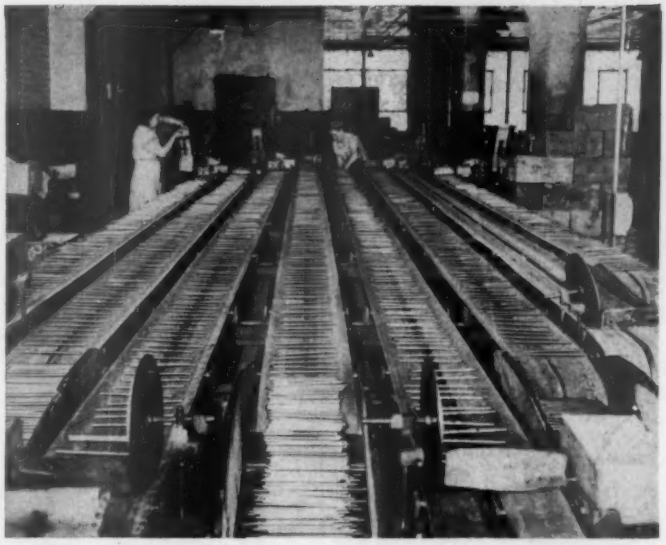

PENCIL FACTORY conveyor belts at Eberhard Faber do wholesale enameling job.

Lead Pencils: Still Growing

Neither ball-point pen nor typewriter has prevented steady climb in sales of lowly lead pencil. As basic writing tool, it is a symbol of growing literacy.

Around the end of World War II, the ball-point pen streaked across the sky, just ahead of the flying saucers. To a war-weary U. S. population, here was a symbol of the bright new world to come.

• **Death-Knell?**—Here was a writing instrument which didn't have to be filled for months on end, which wouldn't explode in an airplane and ruin your clothes with ink. So tremendous was this invention, in fact, that you could pick up odds of 10 to 1 anywhere that it sounded the death-knell of the lowly lead pencil—even though the fountain pen had never done so.

But last week the figures showed that it had meant no such thing. The lead-pencil industry added up its figures for the past fiscal year and found them good; it had done a business of $27-million in sales. And it expects that the coming year will be nearly as good—and every year thereafter.

• **No Starvation**—Ball-point pens never have disturbed the pencil makers because their business has always climbed steadily in the face of even tougher competition. Consider the telephone, teletype, printing, typewriters, fountain pens. Any one of these plus many other developments should have tended to starve the wooden lead pencil out of business. Yet no mechanical writing tool, however effective for specific jobs, has ever seriously put a crimp in the market. The basic writing tool has remained a stick of graphite encased in lacquered cedar.

Perhaps one reason for this is that no writing instrument has yet approached the utter simplicity and versatility of the wooden pencil. It has no mechanical parts to jam or get balky. It won't get ink on your white shirt or on your fingers for no apparent reason. It costs little; when it wears down to a stub you can replace it for pennies. It even has the virtues which the ball-point people acclaimed as unique to their product: It, too, will not explode in an airplane. And it, too, will write under water.

• **Higher Literacy**—The steady growth trend of the market for lead pencils feeds on many diverse elements. Probably the most important, or the biggest, is the increase of literacy and education throughout the world. But this is reflected in business and government more than it is in schools. The former are the two biggest users of pencils; schools come third.

The lead pencil itself has been around for a long time. Yet, in the broad spectrum of history, it is a comparative recent invention—it came, in

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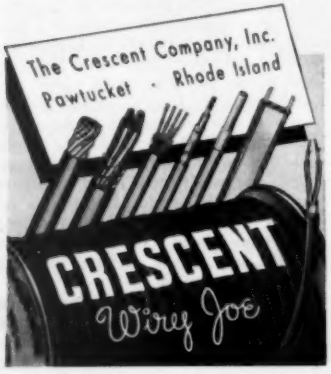


fact, 2,000 years after invention of paper. As every schoolboy comes to know as he uses one, a lead pencil contains no lead at all, and never has. The "lead" is basically graphite, which is a crystalized form of carbon.

• **First Pencils**—The first graphite was discovered in the Bavarian town of Passau around the year 1400. A black, oily, shiny substance, it was known either as "black lead" or plumbago, the Latin word meaning "like lead." But it was the English, under Queen Elizabeth I, who developed the making of pencils into a big industry.

The cause of it lay in the discovery during the 1550's of a remarkably pure graphite deposit at Barrowdale, Cumberland. This graphite was used at first as a writing instrument in its natural form. Then, during the 17th century, the English Guild of Pencil Makers sawed the graphite into square leads, and encased them in wooden shafts.

• **Monopoly**—Since the graphite from Cumberland was so free from impurities (only about 12%), the British had virtually a world monopoly on pencil-making. Manufacturers elsewhere in Europe had to grind their inferior graphite to powder in order to remove its impurities. Their big problem was to find a way to bind it together again so that it would be hard enough to write with.

Before anybody found out how to do this effectively, the Cumberland mine became exhausted. Some 10 years later a man named Kaspar Faber, ancestor of Eberhard Faber of Brooklyn, N. Y., developed one process. This consisted of binding the purified graphite powder with sulfur, antimony, and resins. It was unsatisfactory, but Faber and other pencil makers had to use this process to make pencils for a good many years for lack of anything better.

• **Solution**—It was Napoleon Bonaparte who really solved the problem. Cut off by embargoes from buying any English or German pencils, he was stuck with his own impure French graphite. So he turned to a mechanical genius and scientist in his own army, one Nicolas Conte. Sure enough, he came up with the answer in 1795. It consisted of mixing the purified graphite powder with clay, then firing it like a piece of pottery in a kiln. The result was the firm, hard lead everyone was looking for.

This is still the basic process used in lead-pencil manufacture. And from it also comes the ability to control the blackness and hardness of the lead: Conte himself discovered during his experiments that such control was possible. He found that the greater the proportion of clay and heat he used, the greater hardness and less blackness he could get—and vice-versa.

• **First in U. S.**—The first use of Conte's graphite-clay pencils in the U. S. was made in 1812 by William Munroe. Munroe developed in his plant the first woodworking machinery to make wooden slats, each one grooved to half the thickness of a lead. Two slats were glued together with the lead between—a method which still persists.

In the 1820's, Joseph Dixon began to make pencils at Salem, Mass. Before his death in 1869, Dixon bought the American Graphite Co. at Ticonderoga, N. Y., where he began large-scale pencil production. He was the first to make his leads round in shape.

Eberhard Faber Co., still in the forefront of the industry, was founded in 1849 by the great-grandson of Kaspar Faber of Bavaria. (According to company legend, Abraham Lincoln wrote the Gettysberg Address with a Faber pencil.) Seven years later another family trained in the German tradition—the Berolzheimers—came to America to establish their pencil factory. This was the Eagle Pencil Co., which still operates at its original site on Manhattan's 14th Street.

• **Big Four**—These three manufacturers—Dixon, Eagle, and Faber—together with the American Pencil Co., make up the Big Four of the industry. These alone of the 23 companies in the industry make everything that goes into a lead pencil—leads, slats, ferrules, and erasers.

• **Manufacturing Methods**—A pencil lead today is made up of four principle ingredients: graphite, clay, gums, and waxes. The graphite is imported from Madagascar, Ceylon, and Mexico—the first being best because it contains fewer scratchy particles. Since none of it is more than 50% pure graphite, the first step is to sift out the impurities. The resultant powder is combined with purified, wet clay, and mixed for weeks in revolving drums. The water is removed and the "dough" is compressed under great pressure through an extruding machine. This machine has holes the size of the finished leads.

The extruded lead is automatically cut into lengths about seven and one-half inches. They are then fired like brick in stone crucibles at a temperature of around 2,000 F. The resulting lead is dipped in wax to make it write more smoothly. Special adhesives are then used to bind them into their cedar shafts. After being sanded for smoothness, the pencil is lacquered—sometimes with as many as 12 coats. Finally, a machine presses on the brass ferrule and inserts the eraser all in one operation.

• **Legal but Risky**—It looks like the lead pencil is here to stay. One thing the companies like to point out is that, contrary to popular belief, you can sign a check, a will, or any legal document (which doesn't specify otherwise) with a pencil. There's one catch: You do so at your own risk.

Picture of a Freight Train Making More Money

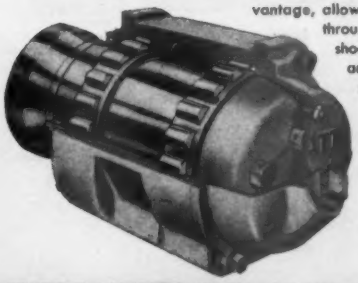
It could be running on any railroad whose operators are far-sighted enough to apply passenger car and diesel locomotive efficiency to the movement of freight.

Think of freight trains highballing along without stops for journal box inspection — free from hot box delays — faster, safer trains equipped with Hyatt Roller Bearing Journal Boxes, saving and making money.

Picture not only freedom from costly hot boxes—schedule upsets —the saving in maintenance—but also the quicker, safer movement of merchandise.

If you are interested in getting freight trains into the making-more-money picture, let us show you what "Hyatts for Freight" can do for you. Hyatt Bearings Division, General Motors Corporation, Harrison, New Jersey.

HYATT OFFERS EXTRA ADVANTAGES



Free lateral, a unique Hyatt design advantage, allows freedom of axle movement through the bearing, thus cushioning shocks, minimizing wear on wheel and truck parts, and insuring against damage to lading.

No press fits to break when removing boxes for inspection.

Reduced inventory is possible because spare axles and wheels need to be fitted with only inner races and spacer sleeves.

Straight radial rollers of generous size provide for maximum load-carrying capacity and longer usable life.

Simplicity of design permits examination of all box and bearing parts with utmost freedom.

HYATT ROLLER BEARING JOURNAL BOXES

How Honeywell Customized Temperature Control Helps Boost Business in St. Louis Shopping Center

Year 'round comfort—winter and summer—keeps customers coming back.

The Hampton Village Shopping Center, located in St. Louis, Missouri, is one of the most progressive community retail operations in the country.

Plenty of parking space, the convenience of nighttime shopping, smart, efficient store interiors—these are some of the reasons why.

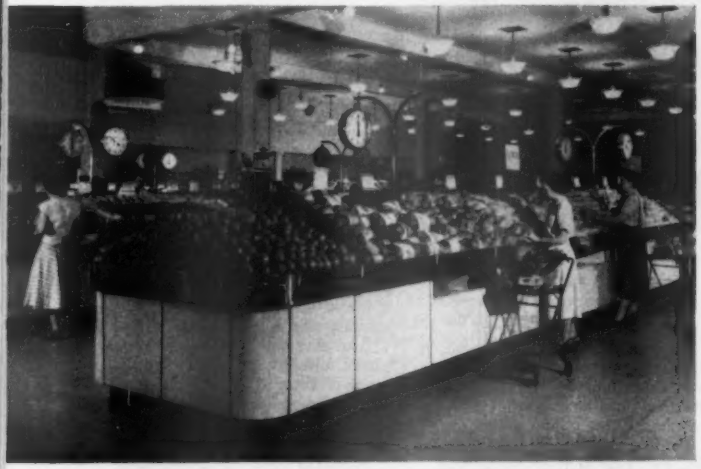
And another reason for Hampton Village's success has to do with the superior kind of *comfort* the center's customers and employees enjoy.

For at Hampton Village, air conditioning and heating plants give *maximum* comfort—because they're controlled by Honeywell Customized Temperature Control to meet differences in exposure, occupancy and use.

As store managers at the center have learned, it's important to furnish customers with an ideal "climate." Because *comfortable* customers keep coming back—and come back more often.

Temperature control problems resulting from exposure are illustrated by the above view of Hampton Village's Medical Center-Shopping area, designed by St. Louis architect Preston J. Bradshaw. The S. S. Kresge store, facing west, absorbs a great deal of sun on hot summer afternoons. The J. C. Penney store (interior, right), with a large glass area to the north, is vulnerable to cold wintry winds. But with Honeywell Customized Temperature Control on guard—neither store is ever uncomfortable.

Separate thermostat systems are located in each ground floor shop in the Medical Center building. Thus, the management of shops like Garland's, above, can maintain the exact temperatures that will please customers and employees. And Honeywell Customized Temperature Control—with a separate thermostat controlling each of several fan units—enables doctors located on the second floor to provide the temperatures their patients find most comfortable.



Exposure and occupancy problems are of first importance in the world-famous Bettendorf Market, above. Floor space is vast, to take care of peak customer load. The building, located in the center of the big parking area, is exposed on all sides to sun and wind. Yet, with Honeywell Customized Temperature Control on the job—with thermostats located strategically throughout the store—Bettendorf customers and employees enjoy an ideal "climate" at *all* times.

MINNEAPOLIS
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For complete facts on Honeywell Customized Temperature Control, call your architect, heating engineer or local Honeywell Office. There are 96 across the nation. Or mail the coupon today.

"It's proved the importance of comfort," says Robert W. Shepard, vice-president of Webb and Knapp, Inc., owners of Hampton Village Shopping Center.

"With the kind of comfort Honeywell Customized Temperature Control helps make possible at Hampton Village, the 'regular' customer list grows constantly. And our maintenance department has had very little trouble."

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Dept. BW-8-177, Minneapolis 8, Minnesota

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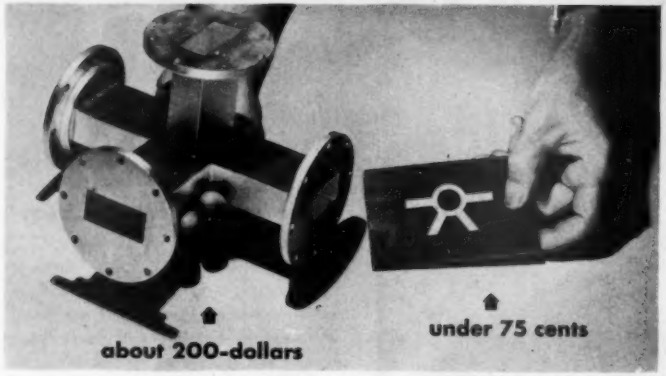
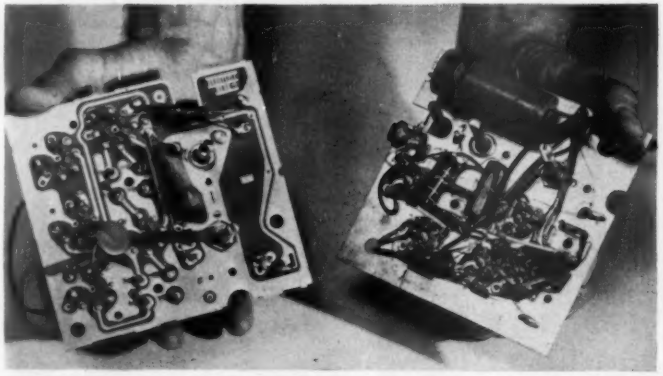


Taking the Plumbing Out of TV . . .



. . . and the Spaghetti Out of Radio

Electronics equipment has changed so fast in so many ways that even a World War II model looks as fussy and old-hat as a 1909 Oldsmobile. Today's assemblies are much more complicated, yet more compact.

Tubes and other parts have been redesigned to do the same work in less space. This cuts down the size of the electronics device itself. And many gadgets such as electronic computers have been unitized, designed in a series of plug-in sections that are easily replaced for repairs.

Yet in one respect even the latest models in general use are back in the horse-and-buggy era: The way the circuits are hooked up has hardly changed since Marconi's day.

• **No Revolution**—The average home radio is a jungle of parts wired together more tidily than in the homemade regenerative super-DXer of 30 years ago, but with no revolutionary difference in technique. And the radar and microwave sets of today—a big business in commercial and aviation communications—depend on a fancy and expensive kind of plumbing, called waveguides, for many of their conductors.

Now, the development of miniaturization and utilization—in the past confined to military and commercial equipment—promises to clean some of the underbrush out of the home radio. At the same time, engineers are working on new and revolutionary replacements for plumbing-type waveguides and for conventional radio wiring.

Two companies have announced developments that give you an idea of what's ahead:

• Federal Telecommunication Laboratories, Inc., a subsidiary of International Telephone & Telegraph Corp., is coming out with a simple, printed waveguide that eliminates the plumbing (top picture).

• Motorola, Inc., has a process for plating the wiring of a whole radio circuit on a sheet of prestamped plastic (bottom picture).

• **Test Run**—Of the two innovations, Motorola's has the greatest direct impact on consumers. The company has already used the plated circuit on a commercial run of one of its small radios. It will probably adapt its portable radios to plated circuits next, and some TV sets will eventually get the same treatment.

Both of the new developments are aimed at the same goal: cutting the size and cost of electronics equipment. They are similar in appearance, too, though they work on different theories.

• **Many Routes**—There is nothing sharply new about plated or printed circuits in the electronic field. Private and government laboratories have been researching them since before the war. The National Bureau of Standards estimates that there are already at least 30 different ways of doing the job. But most haven't got much farther than the laboratory or pilot-plant stages.

All are sound in theory and operation, but most have lacked one or both of the added touches that have put the Motorola and Federal processes on top. Both methods can mass-produce the circuits by a continuous operation. And they are flexible enough to be adapted to a variety of designs instead of only one fixed circuit.

• **Motorola's Plans**—Elmer H. Wavering, vice-president in charge of Motorola's products division, sees the company's radio and TV sets going through a whole series of changes in the next several years.

The first job will be to adapt the plated circuits to various production models. Now that the plated circuits have worked successfully in a small radio, they will gradually go into the bigger portables and into TV sets.

Motorola gave the first plated treatment to its midget set for safety's sake. Production of this set could be easily turned off if the circuit should somehow go amiss in the field. Motorola deliberately avoided an adaptation to a bigger model, say a TV set. The reason, says Wavering, was that the firm "didn't want a 50¢ tail wagging a $200 dog."

• **Redesign**—The parts that make up a set will also be going through changes. Some of the changes will be routine production shifts to newer, better parts. One example: Wavering predicts a switch from the present peanut-sized tubes to the subminiatures, and even-

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All the advantages of the Joy Generator become *yours*. It is simple to start and operate, can be easily handled by ordinary plant equipment personnel and is completely automatic in operation, requiring only occasional inspection and purity checks. What's more, the unit is *inherently safe*—along with a top operating pressure of only 185 psi, it has pop safety valves and an automatic shut-off system.

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This well-known southern firm processes 18,000,000 board feet of lumber annually in the manufacture of fine bedroom and dining room suites. Most of this lumber arrives by truck. Unloading and loading onto kiln trucks was formerly done by manual labor. American now uses 2 Gerlinger Lift Trucks for this work, and for many other jobs such as stacking and storing in the air storage yard...with great savings in man hours and costs. Mr. F. V. Woodson, American's vice-president and treasurer, reports: "With our Gerlingers we now unload trucks in from 5 to 10 minutes where it used to require 2 hours with manual labor. We are also experiencing great savings with our Gerlingers in handling lumber from our yards to the kiln trucks."

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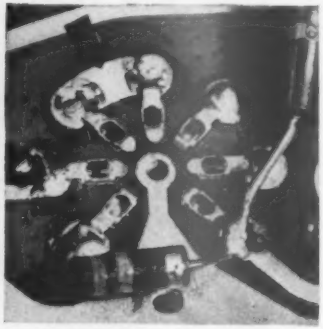
OLD Closeup of tube socket shows wires, rivets, plastic base.



NEW In the plated circuit, the socket is completed in one operation.

there's a way around this

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tually to transistors, when they are commercially available.

A bigger job will be getting the parts manufacturers to redesign their products for use in the plated circuits. Motorola is now using parts that are made for wired circuits, and not too difficult to fit into the plated ones. But it hopes to speed up production through simple changes in the fasteners and connectors of the standard parts.

Take a volume control. A standard unit has connectors, called lugs, bent in a certain way for easy soldering to wires. Motorola has had to redesign these lugs, bending them a different way, for fastening to the plated conductors. A change like that is a major operation for a parts manufacturer who mass-produces controls by the thousands for standard circuits.

• **Process**—Motorola's big aim is to turn out the plated circuits by a continuous and nearly automatic method. The company isn't talking much about this phase of its developments, but says that it isn't far from the goal.

Plastic sheets, the bases for the circuits, are punched out by a stamping machine, four to a strip. Then a liquid coating goes on the sheet in a pattern that's a negative of the circuit. When

Destination Home

The picnic was fun. For once the park wasn't crowded. Mother remembered the salt and pepper. Dad cooked the hot dogs just right. Nobody fell in the creek. And the car brought them home safely through the sudden downpour.

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the circuit is finally plated on, the copper conductor adheres to the clean areas, stays free of the coated portions of the sheet.

The parts for the set are mounted in holes on the base of the plated circuit and soldered in place. The soldering job is now done manually, but Wavering thinks that several parts will be soldered by machines in one crack, some day.

Flexible is the word that describes Motorola's current production of plated circuits. The company wants to make certain that it doesn't run into any production snags later. So it is now cooking up all sorts of hypothetical problems in design and engineering, hoping to find the limits of its production methods.

• **Federal's Invention**—Federal's printed circuit won't make a dent in the consumer goods field. But it's bound to find a whole slew of applications in commercial and military electronics gear that operates in the microwave range. That covers everything from UHF television stations to control devices for guided missiles.

Plumbing-type waveguides have always held first place as conductors in microwave work. Most engineers figured that plumbing was the one and only way of hooking up UHF circuits, and connecting them to antennas. The cumbersome arrangement works with a fair efficiency, too. Few experts ever thought there was a way to replace the plumbing. But Federal researchers D. D. Grieg and Herbert Engelmann found the replacement.

Cost and weight have been the two big drawbacks with waveguides. Their parts have to be machined from a metal to close tolerances. The whole works are soldered together with silver, a craft that isn't widespread. And, finally, the waveguide must be silver-coated. A typical waveguide weighs about 15 lb., costs around $200.

• **Save Two Ways**—Federal's printed waveguides eliminate most of the weight and cost (in price, down to about 75¢). The waveguide begins as a sheet of reinforced glass fiber plastic, which is thinly coated on both sides with metal. The waveguide is reproduced on the sheet by an etching process that's similar to the making of engravings. Actually, several duplicate waveguides are reproduced on one large sheet, and finally cut into individual units.

The conventional plumbing has so far been a big factor in the present high cost of microwave equipment. Now, the IT&T laboratory figures that the printed version will really slash production costs. It may cut the cost of television relay stations to a point that will give the smaller broadcasters a chance to set up their own networks of microwave relay stations.

Remote Control Steers Lifeboat to Target

Engineers of long-range missiles have had two big problems to lick: fuels and guidance mechanisms.

Last week the industry began to feel it had the controls systems well on the way, if not already licked. The Pacific Division of Bendix Aviation Corp. announced that, in effect, it had sent a guided missile on a course of 900 miles, pinpointing the target within one-half a mile.

What Bendix actually did was experiment with a remotely controlled emergency lifeboat. But the similarity of methods to guided missiles indicates an obvious carryover to Bendix Pacific's missile research program.

• **Pre-Set**—Bendix engineers dropped a lifeboat from an airplane, then sent a radio signal to an autopilot in the boat. This pre-set the course of the lifeboat for over 900 mi., and to a half-mile accuracy. The lifeboat could also be steered remotely by a crew-member of the plane.

As a means of wartime rescue, the lifeboat could be dropped to marooned fliers and directed to an easy rendezvous with friendly forces, or to the nearest port.

The idea has its uses, too, in peacetime air-sea rescue work. Bendix feels it will improve rescue chances without endangering additional lives.

Hammer Away

The blockbuster above is one of two giant forge hammers that has started pounding out airframe and engine components for jets in the Toledo plant of Willys-Overland Motors, Inc. The Toledo shop is the world's third-largest commercial forging operation.

LINK-BELT research and engineering . . . Working for Industry

50 million pounds of overburden a day take this 10-minute ride out of the pit

At another pit, Link-Belt self-propelled stacking belt conveyor stockpiles iron ore at 600 long tons per hour. Its 115 ft. radius and 570 ft. travel provide huge storage facilities.

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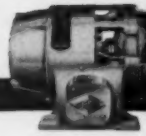

(cut-away view)

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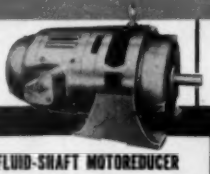

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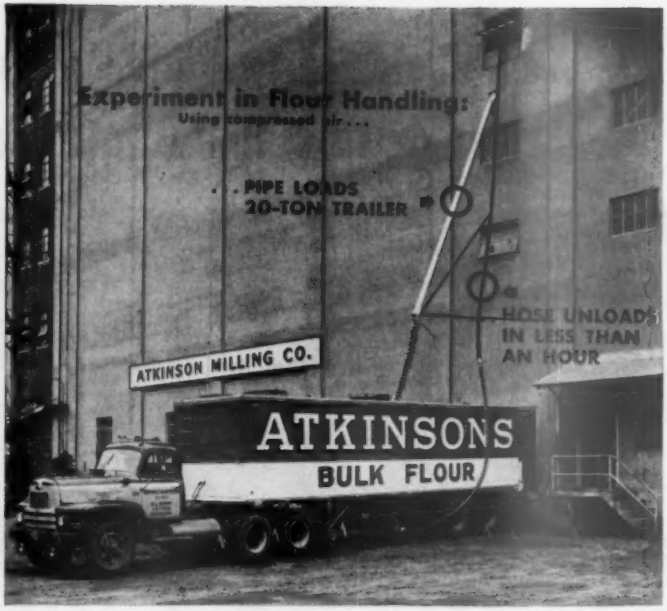


Pump Truck Delivers Flour

Atkinson Milling Co.'s new trailer may cut handling costs for small bakeries. Up to now, they've had to buy their flour in bags and barrels.

The theory of materials handling has an axiom that many small manufacturers will recognize: The smaller the operation, the higher the handling cost per unit.

This holds true with bakeries. Big outfits with private railroad sidings can buy their flour by the boxcar, have it delivered in bulk. Small companies, or those without rail spurs, have to buy flour by the bag or barrel. Not only does this make handling more costly, but it leads to waste from driblets of flour left in the bottoms of bags and barrels. These driblets can add up to a big loss over a year's time.

Now Atkinson Milling Co., Minneapolis, has come up with a special flour hauling tractor-trailer that may beat the axiom for small bakers. The trailer does away with bags and barrels. It can be filled with flour, contains all power equipment necessary to pump flour right into the baker's storage bin (picture, above).

• **Savings**—F. M. Atkinson, president of the milling company, sees five advantages in his trailer:

• It saves time, since it's loaded and unloaded by automatic pumping machinery instead of by hand.

• It cuts labor costs.

• It eliminates bag and barrel costs.

• No flour is wasted as residue in the bottoms of containers.

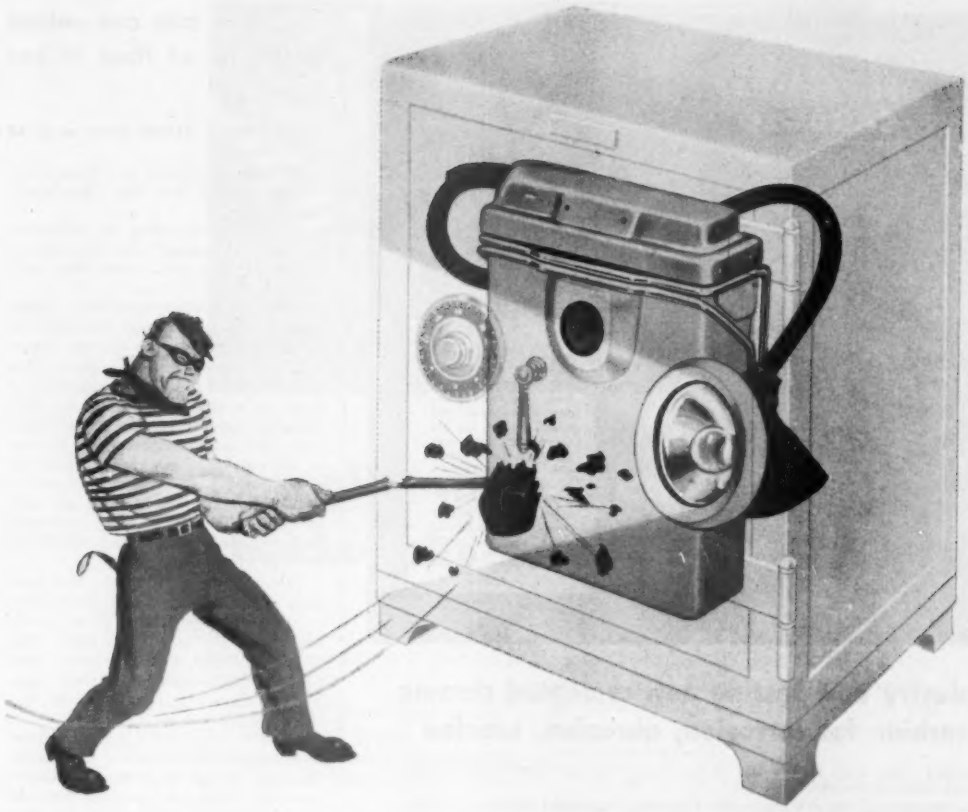
• Warehouse space can be used more effectively, since a storage bin takes up a lot less space than bags and barrels.

• **How it Works**—The trailer can hold 40,000 lb. of flour. It's loaded by an ordinary gravity feed system. A 6-in. hose pours flour into it through a hatch at the top. During this operation, the hatch is covered by a filter boot to keep out dust.

The inside of the trailer has a sloping bottom that slides the flour to an air lock at the center. From there, the flour is fed automatically to a pressurized chamber.

When the trailer arrives at its destination, pumps which are driven by motor blow the flour out of this pressure chamber, through a 3-in. hose, and into the baker's bin.

This isn't the first pneumatic flour handling system, but it's a departure from the conventional. In older systems, the flour was driven through the hose ahead of the compressed air. In



Assault on battery stopped by RUBBER SAFE

During World War II mine owners were forced to use cap lamp battery cases made of synthetic rubber, which were unsatisfactory, due to high breakage. With the war's end they were permitted to resume the use of the best crude hard rubber. But changing mining practices multiplied the hazards these cases had to withstand.

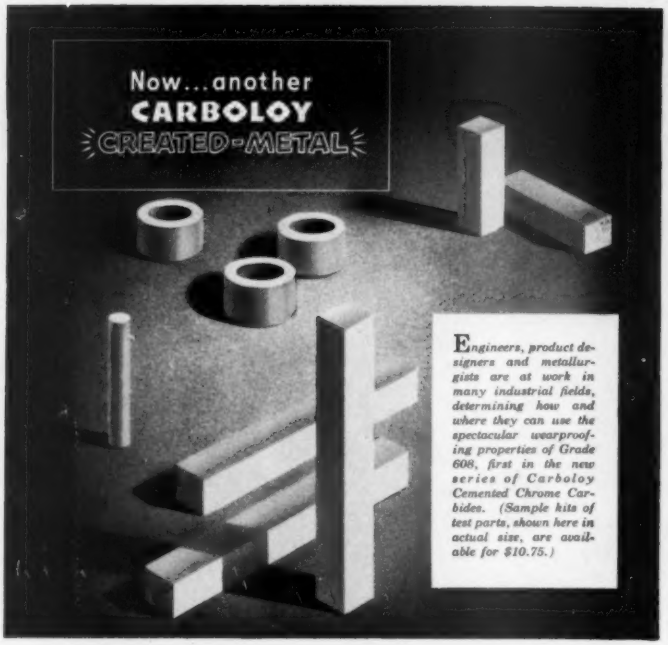
Vibration and shock not only cracked and broke many cases, but caused loss of power due to electrolyte leakage. In addition, declining mining efficiency—brought on by cracking and breakage—shot operating costs up. The Koehler Manufacturing Company, long-time pioneers in supplying the mining industry, quickly saw that here was a problem made to order for Firestone research.

Firestone suggested a special Butaprene compound as the solution. This compound has impact strength 10 to 15 times that of the previous material. Its hardness, abrasion resistance are high. For example, Butalite battery cases made of this special Butaprene compound have never cracked. It protects batteries—in a "rubber safe"—yet actually cuts cost.

Have you a problem? Do you need a compound to cushion, protect, wrap, or waterproof? Would increased resistance to abrasion, oil, heat, acid or steam help make your product better? Would elimination of vibration, noise or shock benefit your business? If so, we suggest you write and let our rubber research engineers help solve your problem. In many cases this can be done with a stock part; in others with a specially designed unit. *Write Firestone, Dept. 5A, Akron, Ohio.*

Firestone Techni-Service *pays off again*

Enjoy the Voice of Firestone, Monday evenings on NBC Radio and Television



Engineers, product designers and metallurgists are at work in many industrial fields, determining how and where they can use the spectacular wearproofing properties of Grade 608, first in the new series of Carboloy Cemented Chrome Carbides. (Sample bits of test parts, shown here in actual size, are available for $10.75.)

Industry now testing new cemented chrome carbide for corrosion, abrasion, erosion

Starting *right now!* Here's the story of another new Carboloy created-metal born to succeed.

It's the story of the new Series 600 Carboloy Cemented Chrome Carbide, containing chromium as the principal ingredient and developed specially for high resistance to corrosion or erosion combined with good abrasion resistance. Grade 608, the first in this new series of chrome carbides (now available in test-sample quantities), promises famous carbide wearproofing benefits for whole new fields of industry.

Lightweight, nonmagnetic, with a coefficient of thermal expansion about the same as steel, Grade 608 chrome carbide is machineable, hard as tungsten carbide, and stable and strong. Field tests indicate Grade 608 is highly satisfactory for gages, and will probably be equally satisfactory for nozzles for fats, oils and acids; and for centrifuge blades and similar cost-cutting, production-boosting, wear-resistant applications.

MASTERS IN METALS

Carboloy Cemented Chrome Carbide is just one of the Carboloy created-metals that help create better products.

Perhaps there is a Carboloy metal with its wide range of advantages that you can use. Carboloy Cemented Tungsten Carbide for more efficient cutting tools, dies, or wear resistance, for example. Or Carboloy Alnico permanent magnets to incorporate in a product and improve its design, lower its cost. Or Hevimet for a better balance weight or radioactive radiation screening.

Then get in touch with a Carboloy engineer for the latest application techniques and all the practical knowledge available on these created-metals.

And look to Carboloy metallurgists, too, for continued pioneering in even broader fields of use for these and other created-metals.

"Carboloy" is the trademark for the products of Carboloy Department of General Electric Company.

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FIRST IN MAN-MADE METALS FOR BETTER PRODUCTS

". . . one man can unload 40,000 lb. of flour in one hour . . ."

FLOUR starts on p. 62

this system, it's floated in a blast of air. Atkinson calls this the "fluidizing" method.

Fluidizing, according to Atkinson, has a big advantage over conventional systems: It can move more flour with less air.

• **Baker's Equipment**—The baker doesn't need any special machinery to handle his end of the delivery operation, but he does need a storage bin big enough to hold large quantities of flour. It would speed things up, too, Atkinson says, if the baker had some kind of conduit system from his bin to the outside of his plant. Thus, the trailer could park by the outer end of the conduit, connect its hose, and start pumping. With this setup, Atkinson says, one man could unload 40,000 lb. of flour in one hour.

Under these conditions, the company adds, a bakery could come close to an ideal operation. Flour would move from the mill to the baker completely in closed tanks and hoses. Sanitation would be about the best possible, and there would be hardly any loss from residue left in containers.

Still, the baker can get away without building special conduits if he chooses. By using enough air pressure, Atkinson says, the truck can get flour into any bakery's bin. In tests, flour has been blown as much as 65 ft. up through a vertical pipe.

• **Improvements**—Atkinson is already thinking up ways to improve its trailer. One of the company's ideas is to divide the inside of the trailer into sections. This way, various amounts of different types of flour could be hauled by the same truck. A regular delivery route could be set up for small bakers—much the same system as is used to service gas stations.

Atkinson doesn't think the usefulness of its special trailer stops at flour. It could be adopted for other powdered materials such as cement, starches, sugar, plastics, and the like.

The flour pumping machinery developed by Atkinson will not be made or sold by the milling company. A similar package unit made by other manufacturers is expected to be available soon for installation on any trailer. Atkinson believes that such an installation will aid large bakeries that wish to operate or lease their own bulky delivery equipment. By making deliveries direct, large milling companies may use the trucks to eliminate a middle-man's profits in transporting the flour.

What really went on behind the scenes at Chicago?

The national conventions at Chicago were like no other party conventions in American political history.

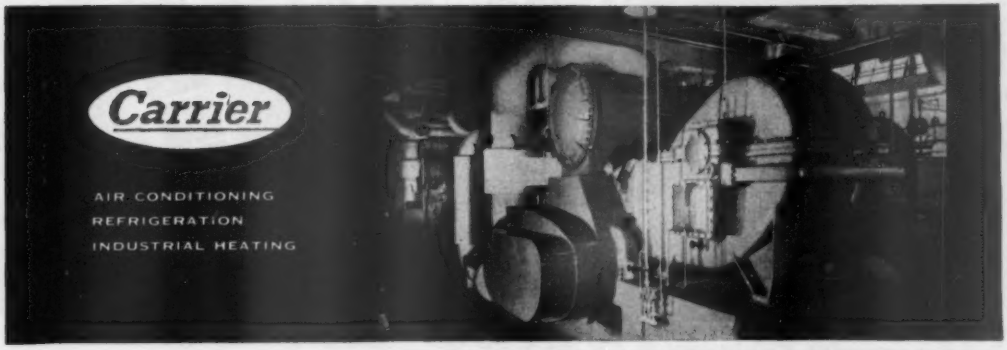
First, the famous "smoke-filled rooms" found themselves without smoke! Haze from Republican cigars and Democratic cigarettes was promptly whisked away by clean, fresh, cool air!

Next, word leaked out that all candidates in both parties saw eye-to-eye on at least one big issue and there were whispers of some super-party machine in the making . . .

The truth is, *two* machines were at work — two newly-installed Carrier Centrifugal Refrigerating Machines which air conditioned for the first time Chicago's 12,000-seat Convention Hall. Liberals and conservatives, northerners and southerners—everybody had to agree they had never disagreed before in such solid comfort!

To make it that way, the two Carrier machines, totaling a thousand tons capacity, chilled some 2000 gallons of water each minute, which was then pumped to cooling coils all through the huge hall.

It was a big job. An historic job. The kind of job Carrier is in the habit of doing. Carrier Corporation, Syracuse, New York.



In 30 years Carrier has built some 2500 of these multi-stage centrifugals—many more than anyone else in the business.

INTRODUCING

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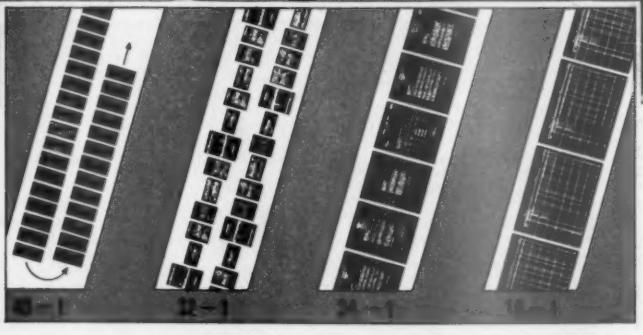

You have this choice of reduction ratios . . . and you can change from one type of recording to another in a matter of minutes—simply by substituting the desired type of lens kit in the camera.

...the "desk-top" microfilmer that gives you more pictures per foot of film...at sensational speeds.

Now . . . you can record up to 29,000 check images . . . up to 10,700 letter-size documents on a 100 foot roll of 16mm. Recordak Microfilm—the greatest number of pictures ever . . . at the lowest film cost per picture!

And the Recordak Bantam Microfilmer does more than cut film costs—it enables you to microfilm at maximum speeds . . . with maximum convenience.

It features a built-in automatic feeder which whisks over 500 checks into the microfilmer per minute; over 200 letter-size documents. *And as for convenience*—look at the compactness of this new microfilmer . . . less than 4 sq. ft. of desk space is required . . . everything's at the operator's finger tips—the feeding tray and the receiving tray, for example, only inches apart.

Versatility Plus

Documents up to 11 inches wide, any length, can be photographed in the Recordak Bantam Microfilmer at varying reduction ratios to suit your convenience. For example, records 11 x 14 inches in size can be photographed at a 40-1 reduction ratio, which gives you maximum film economy; *also* at reduction ratios of 24-1 and 19-1, using readily interchangeable lens kits.* Documents less than 9 inches wide can, in addition, be photographed at a 32-1 reduction ratio with an accessory lens kit.*

Buy or rent at these low prices

The Recordak Bantam Microfilmer (with one lens kit) and its companion piece, the Recordak Film Reader (Model P-40), can be purchased outright for $2225. And one year of service—including parts replacement—will be provided at no extra cost.

The rental cost for this combination is $43.50 per month . . . with no extra charge for servicing or necessary parts replacement.

Write today for complete information on the Recordak Bantam Microfilmer. Recordak Corporation (*Subsidiary of Eastman Kodak Company*), 444 Madison Avenue, New York 22, N. Y. **accessory equipment at slight extra charge*

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"WHERE PRIDE OF PRODUCT PREVAILS"

Next Steps on Atom Power

● **Four industry teams have reported to AEC on the economics of electricity from atoms.**

● **All agree that the prospects look good, but they disagree on what to do next.**

● **Some want the government to build a pilot plant right away; others want a slower, privately financed program.**

Useful power from atomic energy can mean a lot of things. It can mean a demonstration project in Idaho producing a few hundred kilowatts experimentally; it can mean cost-is-no-object power plants for submarines and other naval vessels to make them independent of fueling bases; it can mean nuclear engines for bombing planes to give them practically infinite range.

In these senses, atomic power is just about here. Such things are coming into service this year and over the next few years ahead.

But the average businessman will figure the day of atomic power is here when he sees a commercial plant feeding electricity onto the nation's power grids. In that sense, nuclear power, it now appears, is some four to 10 years away. This week officials of the Atomic Energy Commission are studying reports from four different industrial groups on the economic and policy questions involved.

• **Agree, Disagree**—Although AEC is keeping the reports confidential, it appears that they are in substantial agreement on at least two points:

• Commercial production of quantities of atomic electricity, competitive with present power sources, is going to be feasible within the next few years.

• Availability of atomic power will not reduce the cost of electricity. But what it can do is double, perhaps more than double, the potential reserves of fuel.

Two sharply divergent views emerge from the reports, however, on what ought to be done next.

• One view: Start building a power producing reactor, of as simple design as possible. Do it with government money. If it works out, industry might be willing to put some money in.

• The other view: Let industry start working out a sophisticated, advanced design—with its own money—which would look attractive enough to justify private investment.

• **Where's the Power?**—The problem on atomic power is not to produce power. We've been doing that since 1943. The problem is to put the power to use.

To understand what's involved, take a look at the Hanford reactors which were built during the war. Uranium metal—containing one part of fissionable U235 for each 140 parts of nonfissionable U238—is loaded into these reactors. A quantity of the U235 "burns," producing heat and also transmuting a somewhat smaller quantity of U238 into fissionable plutonium. You throw away the rest of the U238. (The point of this stupid-seeming procedure is that it is hard to separate U235 from U238 to make bombs, while plutonium, being a chemically different element, is easier to separate.)

The heat produced is power, in enormous quantities. Trouble is, the reactors are so designed that you dare not let them get hot. So millions of gallons of cold water are flushed through the reactors to carry away the heat.

• **Other Ways**—Obviously, there are other things you could do. You could build a reactor with enough heat resistance so that you could let it get hot—hot enough to produce steam and drive an engine—and more or less ignore the business of extracting plutonium, concentrating on use of the heat. That, essentially, is what Westinghouse is doing in its submarine engine. It's a terribly expensive way to get power, of course. The Navy doesn't mind; it's used to paying about $1.50 per kwh for power in submarines (against maybe 1¢ per kwh household rate). But it's not attractive to industry.

Still another approach is to design a very sophisticated machine using everything we know about nuclear engineering—a reactor which would produce the maximum amount of plutonium possible and also run hot. This looks very promising for the future; it would be a "breeder," transmuting more U238 into plutonium than the amount of U235 it consumes and thus making very economical use of uranium. Trouble is this involves use of trick structural materials, enriched fuel, and other complications. A baby machine of this type is now being operated at the AEC's Idaho Falls proving ground, but construction of a big one is still far in the future.

• **Proposal**—Back in 1950, President Charles Thomas of Monsanto began

talking about still another approach. Why not build a fairly straightforward plutonium-producing reactor but modify it just enough to let it run hot, make steam, and generate electricity. Then plutonium for bombs could carry the bulk of the cost; electricity would only have to carry the extra cost involved in running hot.

Thomas intimated that, if his engineers could get a look at the secret data, this sort of thing might look attractive enough to justify Monsanto in building a reactor with its own money, selling plutonium to the government, and selling or using the electricity.

• **Study Plan**—AEC's response was to work out a deal with four different industrial teams. Each was to look into the economics of the thing, report to AEC on the commercial possibilities. The teams: Monsanto and Union Electric of St. Louis; Detroit Edison and Dow Chemical; Pacific Gas & Electric and Bechtel Corp.; Commonwealth Edison and the Public Service Co. of Northern Illinois.

Preliminary reports are now in from all the groups.

The gist of the Monsanto-Union Electric report is that it still thinks its original idea was a good one but that the time is not quite ripe for private investment. It wants AEC to build a dual-purpose plant first, with government money, and see how it works out. AEC has no funds for such a project and is noncommittal. Rep. Henry M. Jackson, a member of the Congressional Joint Committee on Atomic Energy, is proposing expenditure of $30-million to $40-million on a substantial pilot plant capable of producing the power for a medium-size city.

The West Coast and Chicago groups are apparently in general agreement with Monsanto.

But a sharp disagreement comes from the Dow-Detroit Edison group. Apparently they see little promise for the future in a dual-purpose plant dependent for its revenue on a military demand for high-priced plutonium. A commercially interesting plant, in their view, should be a breeder, of advanced design, perhaps based on the principles of the little Idaho Falls machine. As a breeder, such a machine would produce more fissionable material than it consumed, might be able to operate on the basis of feeding the plutonium it makes back into the power plant as well as by selling plutonium for bombs.

It will doubtless take longer this way, but the two companies think so well of the eventual commercial possibilities that they want to spend some $275,000 of their own money over the next year on preliminary engineering. AEC has told them to go ahead on this basis.

At this stage of the Dow-Detroit Edi-

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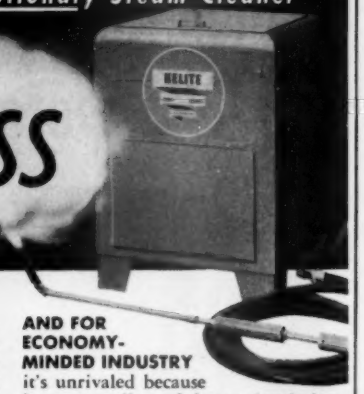

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son project the company engineers are working on the design of a definite machine rather than investigating general possibilities. Their thinking is running now toward a breeder reactor, possibly one in which thorium, rather than U238, might be transmuted into fissionable material.

The machine would run at about the temperature of a modern high-pressure steam plant. The heat would be carried away by circulating molten metal through the reactor.

The engineers have given a lot of thought to the problem of location. If you produce power you want it in populated areas; but a reactor probably ought to be fairly remote for safety and secrecy. Tentative solution: Build the machine on a barge or ship. You could construct it conveniently in a shipyard, float it later to where you want it.

Finally, the engineers think they can develop simpler methods of chemical treatment of the fuel.

With all these, the two companies see a possibility of delivering heat to the steam turbine throttle at a cost competitive with coal.

PRODUCTION BRIEFS

Matibana, a 100% acetate tricot for blouses and dresses, has just been announced by du Pont. The new fabric feels drier to the touch, has a duller, more crepe-like surface than the usual tricot. Du Pont claims it retains all of the qualities of acetate, such as superior draping, good wrinkle resistance, and affinity for sharp, brilliant colors.

•

A diesel-electric railroad car, adapted from a 50-passenger Mack bus, made its debut this week on a 17-mi. stretch of the New York, New Haven, & Hartford R.R. out of Fall River, Mass. It is expected to cut operating costs in light-service areas by 75%.

•

Gateway Center in Pittsburgh is equipped with the largest commercial air-conditioning unit in the world. Only the Pentagon's system is larger. The new system, built by Carrier Corp., furnishes conditioned air for the three Gateway buildings completed to date.

•

Federal Power Commission has authorized Texas Gas Transmission Corp. to build a 408-mi. pipeline for natural gas from Louisiana to Ohio. Cost is estimated at $33.7-million.

•

B. F. Goodrich Co. announced this week the first successful application of its tubeless tires on farm implements. These tires eliminate the hazard of tube pinching when implements are moved from soft fields to paved roads.

NEW PRODUCTS

1912: Tightening Nuts by Hand

1952: One Machine Does It All

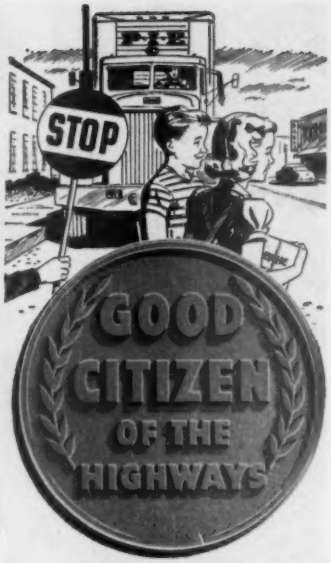
The business of tightening nuts on the assembly line has come a long way since the top picture was taken in 1912 at a Ford Motor Co. plant.

In those days, a man with an open-end wrench could tighten about 110 nuts in an hour. About 1917, the speeder wrench increased his run-up to 220 per hour; around 1928, single-headed power tools again doubled his capacity to 440 an hour. Still, the nuts had to be run one at a time. Furthermore, if the single-station power tool locked, it could knock a man down. Every nut had to be rechecked for tightness by a torque wrench.

Now comes the multiple nut-runner (bottom picture) that boosts a man's capacity to tightening as many as 3,500 nuts per hour with a five-spindle machine. Ingersoll-Rand Co. designed the air-operated tools, which Ford has been test-running for a year. Some work on five nuts at a time, others four.

• **Wartime Invention**—During World War II, an aircraft manufacturer recognized the one-by-one tightening of nuts as a bottleneck in his production line. He decided to try to mass-produce the operation of turning a nut or screw to keep pace with the mass-production of parts.

This manufacturer mounted three Ingersoll-Rand single nut-runners on a frame so they engaged three cap screws on a standard part he was making. It worked beautifully. From this beginning, Ingersoll-Rand engineers worked



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With America's motor freight industry, "safety first" is not only a watchword—it is a must. P•I•E drivers are professionals in every sense of the word; carefully selected, thoroughly trained, continuously supervised. Hundreds of professional motor freight drivers like these have compiled astonishing safety records for accident-free driving over millions of miles of motor freight routes. Their skill is recognized by safety awards presented them annually by the American Trucking Associations and the National Safety Council.

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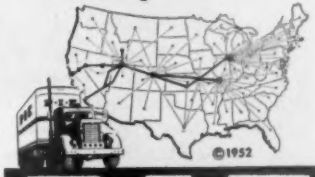

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...all fit into the same picture

Billions of air bubbles per cubic foot are added to most concrete highways today. This "air-entrained" concrete stretches highway tax dollars by producing longer-life concrete that resists freeze-thaw damage and eliminates scaling caused by de-icing chemicals.

These locked-in, disconnected air bubbles are created by an air-entraining agent added to the cement or concrete mixture. Though microscopic (about six ten-thousandths to three one-thousandths of an inch in diameter) they provide expansion chambers to relieve the destructive pressure exerted by the freezing of water which seeps into the capillaries in the concrete pavement.

Introduced only 15 years ago, air-entrained concrete now is specified for all new concrete highways in 30 states and for some paving in 11 others. First used only for pavements, the greater durability, easier workability and better appearance of air-entrained concrete recommended it for other construction. Today it is being used more and more for structural jobs of all kinds.

Air-entrained concrete is another example of how the research activities of the Portland Cement Association, often carried on in conjunction with other agencies, pay off in more durable, higher quality concrete and ***lower-annual-cost*** concrete construction.

PORTLAND CEMENT ASSOCIATION

33 W. Grand Ave. / Chicago 10, Ill. — A national organization to improve and extend the uses of portland cement and concrete through scientific research and engineering field work

with the major automotive companies in the postwar period to develop multiple nut-runners for a variety of assembly-line jobs.

• **How It Works**—This is how an I-R multiple unit works. Take a part that has 10 cap screws arranged in a circle. A 5-spindle tool has been designed for this job so that the five motors fit over alternate cap screws in the part. The unit runs all five cap screws at one time.

Torque is controlled by regulating incoming air pressure. The operator merely lets the tool run until it stalls. Since all five motors are identical and are running simultaneously on equal air pressure, all screws are run to the same degree of tightness. It is no longer considered necessary to hand-check the tightness after this operation.

When the first five cap screws are run down, the operator presses a button that admits air to a cylinder in the center of the tool. This actuates a piston that disengages the sockets and serves as a pivot point for rotation of the nut-runner to engage the next five cap screws.

• **Lightens Work**—Besides speeding up production, in some instances as much as 70%, the multiple units have enabled Ford to employ many older, experienced men. The units, suspended from overhead spring balancers, can be operated by men who were not considered strong enough to use the single-station power tools.

• *Source: Ingersoll-Rand Co., 11 Broadway, New York 4, N. Y.*

NEW PRODUCTS BRIEFS

Shu-Dri Bags are designed to absorb moisture from shoes of any material and deodorize them overnight. The manufacturer claims they can even control the odor problem in children's sneakers. Price is $1.29 per pair from Wilhow Laboratories, 7113 Greenfield Ave., West Allis 14, Wis.

•

A heavy-duty chassis, with equalizer beams to distribute weight load on rough roads, has been announced by White Motor Co., Sterling Div., Milwaukee, Wis. The new model, SB 3255D, is engineered for the rugged off-the-road service of handling drilling rigs and other heavy oil-field equipment.

•

A dressing for belts of industrial machinery has been put up in spray containers so it can be applied to inaccessible places without danger that the operator will get caught in moving machines. Belt Spray is fireproof, waterproof, colorless, nonstaining, and nontoxic. Price is $1.50 for a 12-oz. can (enough for 300 sq. ft.) from Abel Transmission Co., Plainville, Conn.

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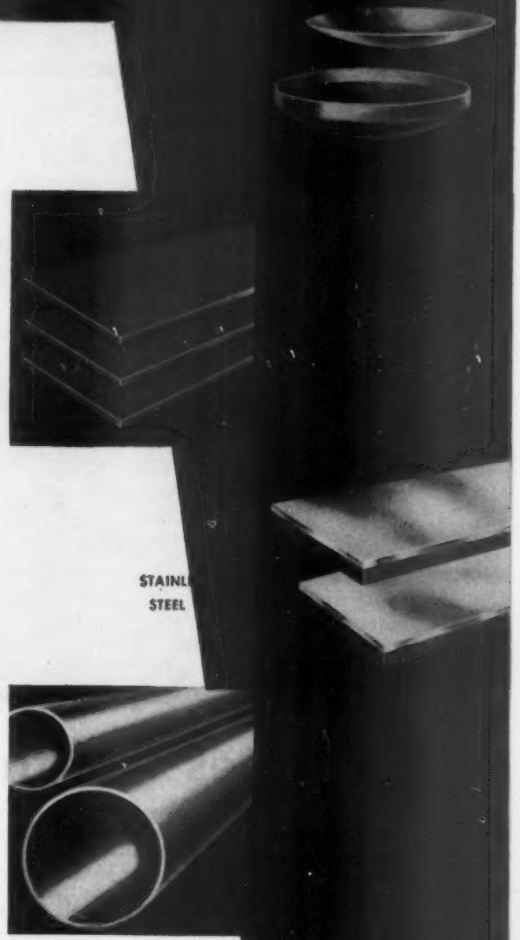
We would welcome an opportunity to show you how our specialized facilities can supply you with steel and steel products that are tailored to meet your most exacting specifications. For additional information write to Claymont Steel Products Department, Wickwire Spencer Steel Division, Claymont, Del.



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CFI

Rail Revenues Have Zoomed to All Time Highs Lately...

...But Earnings Have Lagged Badly

THE REASON:

Many carriers have been performing well but...

...The biggest eastern trunk lines have dragged the average down

(1929 Net Income = 100)

	Santa Fe	Southern Pacific	Southern Ry.	Ill. Cent.	L. & N.	Nickel Plate	Balto. & Ohio	N. Y. Central	Penna. R.R.
Best War Year	121	123	185	186	155	124	157	81	100
1946	64	53	51	56	85	76	16	def.	def.
1947	78	70	66	111	97	111	32	3	7
1948	103	82	106	155	135	208	77	19	34
1949	82	64	66	121	60	211	24	13	12
1950	135	107	124	218	177	284	52	24	38
1951	110	105	104	136	166	250	67	19	26

Eastern Lines Pull the Rails Down

Railroads serving the populous northeastern quarter of the country have the most potential patrons per square mile—and the most problems.

You saw that during and after the steel strike. Just as the eastern trunk lines in good times carry coal and ore to the steel mills, steel from the mills to industry, and products made of steel to markets, in bad times they have a vast traffic void.

• **Long-Range Hazards**—On top of this, Eastern roads share problems common to all railroads:

• Competing forms of transportation have been cutting into traffic postwar just as they did before World War II. Freight ton-miles of Class I carriers last year ran only 45% above 1929 even though the country's industrial production had doubled in that period. In spite of population growth, passenger traffic was approximately 38% below the 1929 level.

• Mounting costs and tax burdens have been pressing more and more heavily on net earnings.

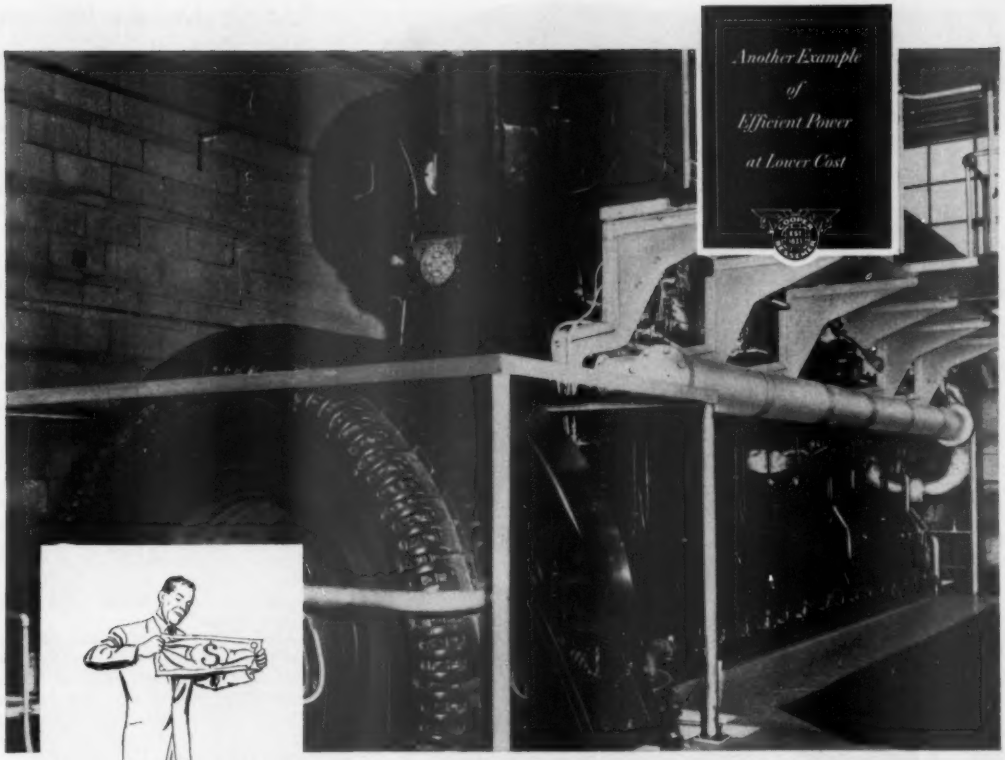
• **Rate Rises**—Some of the gaps in revenues have been bridged by a succession of freight and passenger rate increases.

These increases, however, have fallen far short. Costs and taxes have been rising faster than gross income. Thus, profit margins have been narrowing sharply. So while revenues have been rising in recent years to one new peacetime high after another, net income of the Class I group in the postwar period has yet to come anywhere near matching the total racked up back in 1929. Last year, for instance, gross was some 65% higher, yet net was 23% less, than 1929.

• **Three Sufferers**—The chief victims, though, have been leading eastern trunk lines such as the Pennsylvania, the nation's largest rail carrier; New York Central, the third largest; and Baltimore & Ohio, the sixth largest.

What's more, you will find this: The showing of these systems has been making the over-all performance of the Class I roads look a lot worse than it really is. Eliminate those three from the 1929-1951 comparison and you find that net rail earnings last year fell only about 8% under their 1929 level, compared with the 23% decline when the three eastern trunk lines are included.

• **South and West**—What has been happening is this: Industrial relocation and increasing development in the



How they stretch dollars

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Like waste heat recovery, Cooper-Bessemer supercharging, aftercooling and gas-diesel fueling are all modern means of making power dollars stretch much, much further! If you have heavy-duty power needs coming up, it will pay you to find out about the *newest* things being done by one of America's *oldest* engine builders.

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". . . it showed a 1951 net seven times that turned in by the Central . . ."

EASTERN LINES starts on p. 74

South and West has lately gone far to soften the impact of higher costs on roads operating in those regions. Once pretty much dependent upon agricultural traffic, such roads have been enjoying an increasing diversification and a constantly increasing volume of freight since 1940.

As a result, their revenues lately have been climbing at a considerably faster pace than have those of the Pennsy and its neighbors. Their earnings have done better, too (even though their costs have been bothersome).

For one thing, they enjoy longer freight and passenger hauls than do Pennsy, New York Central, and B&O. And most are not saddled with much in the way of commuting service, which rarely produces anything but losses. Even more importantly, they aren't forced to maintain so many expensive-to-operate terminal properties as their eastern cousins.

• **Santa Fe**—Take the Santa Fe, for example. Though its revenues last year were less than 54% of those chalked up by Pennsy, that leading transcontinental was actually able to report earnings three times as large as those of the East's leading carrier.

On revenues only 69% of those reported by New York Central, it was able to show a 1951 net seven times that turned in by the Central.

• **Pennsy**—What has been happening to the eastern trunk lines? Take a look at the Pennsy. You couldn't find a better case study. Despite the climb of gross revenues to a $1,044,387 level, a new historic high, last year it was able to report profits of only $26.7-million. Back in 1929, it racked up a net of $101.4-million on a gross of only $682.7-million.

Prior to Pearl Harbor, Pennsy had commanded the respect of a large segment of the investing public. During the depression period, it covered its fixed charges adequately each year. In that period it also maintained an unbroken dividend record. And in World War II it continued to chalk up an outstanding transportation performance.

In the postwar period, however, the road has lost the high investment standing it once enjoyed. In 1946, for the first time since it started in business in 1846, it failed to earn its fixed charges fully. And, while it hasn't lapsed similarly since then, it has been evident lately that a fundamental change has occurred in the carrier's basic position.

Once upon a time, Pennsy was able

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C OVERAGE
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K NOW-HOW
American has handled more freight than any other airline

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to operate "cheaper" than the average Class I system. In recent years, however, that hasn't been the case. Last year, for example, its operating costs absorbed as much as 85.5% of gross revenues as against only 77.4% for the industry as a whole.

• **Reasons**—The causes of this abrupt change aren't hard to pin down. For one thing, Pennsy's large passenger business has been producing mighty losses in recent years (about $49-million in both 1949 and 1950). Its earnings have been drained by its huge freight and passenger station expenses as well as its heavy load of unprofitable branchline mileage.

Then, too, management got a late start at cutting operating costs by modernizing Pennsy's equipment and facilities.

• **Shelving Steam**—It is true that Pennsy is now embarked on a tremendous postwar rehabilitation program. Already it has placed in service some $522-million of new equipment. Another $136-million is slated to be spent on this program. When equipment is delivered, the road expects to be able to handle 82% of its freight operations, 96% of passenger service and 92% of its yard work with electric or diesel-electric power units. Outlays also cover 31,860 new freight cars and heavy repairs to another 36,000 cars.

Pennsy emerged from the war with few diesels plus many cars in bad order. Not until 1948, in fact, did it start to take positive steps to relieve this situation. As a result, few savings from use of the new equipment have shown up thus far. And those have been largely nullified by rising costs, plus the necessity for heavy maintenance expenditures.

In time, of course, the displacement of steam power by modern diesels, plus all the replacement and repair of rolling stock, should show up in operating economies.

• **Financing**—As a result of the program, Pennsy by the close of this year is expected to have some $383-million of equipment obligations outstanding, compared with only $87-million at the 1946 yearend. Nor does this include $54-million of freight cars leased from Equitable Life.

As a result, equipment maturities and Equitable Life lease payments will for a time run around $40-million annually. That's well in excess of current equipment depreciation accruals (normally used to take care of such type of debt). This year, the latter are expected to run only in the neighborhood of $33-million.

This factor could prove important if we should run into an extended business recession. The road in addition has to meet, through 1968, some $293-million of other maturing obligations, plus mandatory sinking fund payments of $42-million.

• **Retrenchment**—Just how successful Pennsy will be in cutting down its heavy passenger losses and terminal charges very soon appears problematical.

Take, for example, the dumping of unprofitable trains and mileage. It is necessary first to obtain the approval of state authorities as well as the Interstate Commerce Commission. In the past, such steps have always proved long and tedious. Even when they succeeded, the benefits often have been erased by over-all wage increases.

Moreover, the Pennsy appears virtually obligated always to carry on a much larger amount of yard switching and freight and passenger terminal operations than other systems serving less densely populated areas.

• **Wage Costs**—This is a basic factor that hurts more than you might think. Wages account for a large part of switching and terminal expenses. This helps explain why Pennsy's profits have been so vulnerable to the sharp uptrend seen in rail wages.

Last year, for instance, payrolls absorbed 54¢ of each dollar of Pennsy's revenues, compared with only 48¢ for the Class I roads generally. (New York Central's ratio was even higher; its wages gobbled up about 56¢ of each revenue dollar.)

Not all these factors apply equally to other eastern roads. B & O passenger business, for example, plays only a minor role. That's why it has been able to turn in a better performance lately than Pennsy and Central.

• **Market Response**—Whether the basic problems facing the eastern trunk lines can eventually be solved is a moot point now. Many Wall Streeters and investors seem to have considerable doubts.

That is why you now find the common shares of Santa Fe, Southern Pacific, and Union Pacific selling at levels 19.6% to 48.5% above their 1946 bull market peaks and B & O, New York Central, and Pennsy commons going at prices 23.1% to 57.4% below the same highs. It explains, too, why you haven't noticed many eastern rail stocks ballyhooed in the Street lately, except as definite "near-term speculations."

Nor do the eastern carriers have potential reserves of minerals or oil to catch speculators' fancies.

Biggest Revenue Bond Issue

A check for $319,882,972.22, proceeds of the $326-million Ohio Turnpike revenue bond issue, is turned over by T. Henry Boyd (left) of the investment banking firm of Blyth & Co. to James W. Schocknessy, chairman of the turnpike commission. Blyth & Co. was one of the underwriters for this issue, the largest revenue bond offering in history. The bulk of the cash was reinvested in short-governments, but it failed to halt the sag in prices (page 92) very long.

Insurance in the Red

Last week, a casualty insurance company passed its quarterly dividend and put the blame on the "refusal of some state insurance commissioners—Massachusetts and New York, for example—to recognize sufficiently this inflationary trend and grant adequate rates."

Wallace Falvey, president of this company, Massachusetts Bonding & Insurance Co., was particularly bitter about his home state. He said it was almost impossible for any company to write compulsory auto insurance in Massachusetts without going into the red.

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FINANCE BRIEFS

The steel strike cut second-quarter earnings of Bethlehem Steel Co. to $5.4-million, compared with $23.6-million in the same 1951 period. Net billings were $110-million below the same 1951 period, $125-million below the first quarter of this year. Meanwhile, some Wall Streeters figure U. S. Steel earned only 10¢ to 15¢ per common share in the second quarter.

•

Business loans by New York city banks dropped $57-million for the latest reported week. That's the fifth consecutive decline. Last year, there was a $98-million gain in the same week.

•

Bell Telephone had no trouble getting stockholders to subscribe to its huge offering of $499-million in 3¼% 12-year convertible debentures. When subscription rights expired last week, 99% of the issue had been subscribed for.

•

Relaxation of Regulation W last May, caused a big jump in time buying. The Federal Reserve Board says instalment credit jumped $593-million in June, after a $447-million rise in May. Most of the rise was to finance car sales.

•

July trading on the New York Stock Exchange was lowest for any July since the bull market began. Volume was about 24-million shares, compared with 28-million in the same 1951 period.

•

Not enough money: Two-thirds of the people in the U. S. who don't own stock say they don't have enough money to buy it, according to additional data released from the Brookings Institution's study of U. S. stockholders (BW—Jul.5'52,p36).

•

Gulf Oil says it's going to put over $200-million into capital expenditures this year. In the first half, it spent $102-million, up about $32-million from the same 1951 period.

•

Glenn McCarthy, Inc.'s sale of $20-million of common stock was blocked temporarily by Securities & Exchange Commission. Dresser Industries, which built a chemical plant for McCarthy interests, says McCarthy personally owes about $1-million on notes he signed.

•

Hotel profits were down in 1951, according to industry accountants Horwath & Horwath. They figure that "average net return on fair value" of 100 representative hotels dropped to 5.26% from 5.66% in 1950. Room occupancy dropped from 81% in 1950 to 79% in 1951.

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A process of the Coated Products Division

AUTOMOBILE MASS PRODUCTION owes much to "man-made minerals." A remarkable form is FERROCARBO, a deoxidizer used in many metallurgical processes. Added to the molten metal, this product by CARBORUNDUM produces metal that yields stronger, cleaner, easier-to-machine castings, of which the motor car industry utilizes millions.

Product of the Bonded Products and Grain Division

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Produced by the Refractories Division

"The pleasant life" is vastly more pleasant today than ever before—in large measure because of the "man-made minerals," silicon carbide and aluminum oxide by CARBORUNDUM. These products of the electric furnace have been put to work in an infinite variety of ways to lower the cost of luxuries and necessities alike, and so to make them available to more and more people.

Wherever you find a product which has been formed, shaped, drilled, enameled, baked, painted, polished or sharpened, you can be sure it's been helped on its way to market by the "man-made minerals" pioneered by CARBORUNDUM. Equally so wherever you find a process involving diffusion, filtration, resistance to heat, chemical attack, corrosion, abrasion.

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Field Warehousing Gets Popular Again

● It's a system whereby a company borrows on its inventory, sets up a "field warehouse" on its own premises. A disinterested warehouse concern guards the inventory until loan is paid.

● It flourished during the depression, when operating losses depleted working capital.

● Now it has sprung up again. Today there may be as many as 10,000 field warehouses in the U.S.

Today's shortage of working capital has done a lot to popularize a financing method that first became popular, for another reason, during the depression. This is field warehousing—a method by which businesses that need more capital than their credit rating calls for can use inventory as collateral for loans.

Normally, banks hesitate to loan on inventory left in the possession of the borrower. Too many things can happen to it. That's why, thirty or forty years ago, you would have had to put your inventory in a public warehouse, in the possession of a disinterested third party, and give the warehouse receipts to the bank as collateral.

Field warehousing makes things a little easier. Under this setup, you set up a "public warehouse" right on your own premises, with your merchandise in custody of one of the field warehouse companies. Many banks will lend you money on the field warehouse company's receipts, just as they would on those of a public warehouseman.

• **Growing Volume**—This type of collateral has become a good deal more popular in the last few years because a lot of business concerns are doing a larger volume of business, and need more working capital. Few are able to get it through unsecured loans. They prefer field warehousing to a public warehouse, because it saves hauling and storage charges. And it's a lot more convenient when, as sometimes happens, the warehoused goods are in process of manufacture.

Back in 1941, the National Bureau of Economic Research concluded from a survey that there were about 5,000 field warehouses in the U.S. containing between $25,000 and $100,000 worth of merchandise. The average bank loan on this type of collateral was estimated to be around $40,000.

Today, field warehouse people estimate that there may be as many as 9,000 or 10,000 field warehouses in the U.S. Naturally, the number varies constantly, since these are temporary arrangements. If you assume that the value of merchandise in these warehouses has doubled, in keeping with the rise in prices since 1941, you would come up with an average loan figure of $80,000—or a total outstanding loan volume of $800-million.

• **Early Days**—The field warehouse came to maturity back in the depression years, when banks were particularly anxious to stay liquid, while at the same time working capital of borrowers had been depleted by years of operating losses. At the time, there were perhaps 3,000 field warehouses in operation, compared to a much smaller number a decade before.

• **Machinery**—Here's how a field warehouse setup works: If your bank or other lender is willing to make a loan on this basis, a field warehousing company checks over your premises. It establishes a warehouse there, keeps it locked or guarded in some other way, and posts it to show that the property inside is in possession of the warehouse company.

This field warehouse could be a cattle ranch, a tank, or even a bureau drawer. The method has been used to borrow against goods as diverse as cattle, garden seeds, watch springs, steel, jewelry, and fuel oil.

Companies in the field warehousing business include: Lawrence Warehouse Co., San Francisco; American Express Field Warehousing Corp. (subsidiary of American Express Co.); Douglas-Guardian Warehouse Corp., New Orleans; St. Paul Terminal Warehouse Co. and its subsidiary, New York Terminal Warehouse Co.; and Banks Warehouse Co., Chicago.

• **More Takers**—Though there are plenty of banks who won't loan on field warehouse receipts, the number who do seems to be increasing. As a matter of fact, the majority of field warehouse setups are initially suggested by the lender.

You'll find generally that banks which make a lot of commodity loans will tend to accept field warehouse receipts as collateral. For instance, San Francisco's Bank of America, No. 1 U.S. bank, set up a special field warehousing department back in 1936. Last year, the bank made loans of that type amounting to over $100-million.

• **Demand**—Although the technique seems to have got its start in the canning industry, it may be used to solve the credit problems of any seasonal business. In fact, it can be applied to any business where volume of sales is large in relation to net worth, and where more orthodox forms of financing aren't possible.

In lines where it's possible to produce all year round, but demand for the product is seasonal, field warehousing makes it possible to get into production before orders are received. That levels off rush periods, cuts overtime wages, and makes it possible to keep a larger permanent staff. Because the manufacturer can get financing, he can take advantage of suppliers' cash and quantity discounts, get carload freight rates.

• **Costly Loans**—You have to balance these advantages off against the high cost of field warehouse loans. Banks usually charge higher rates on them than on unsecured loans—partly because the borrower's credit rating is lower, and partly because there is some extra paperwork. Rates lately have ranged from 4% to 6%. Finance companies' or factors' rates are usually higher.

On top of that is the warehouse company's fee, which runs from ¾% to 2½% of the loan, depending on size and other factors. It's not considered economic to handle loans of less than $5,000 or $10,000 in this way.

Part of the charge the warehouse company makes is for the pay of a warehouse custodian, who controls all entrance and exit of goods, and takes a frequent physical inventory. Usually this custodian is an ex-employee of the borrower, picked because he knows how to handle the goods concerned.

• **Liability**—The custodian is bonded by the warehouse company against dishonesty. The company may also carry legal liability insurance to pay losses for which it may be liable. For instance, Lawrence Warehouse Co., believed to be the biggest in the field, carries a $500,000 fidelity bond on each warehouse, plus $500,000 legal liability insurance.

There are lots of things that could go wrong for which the warehouse concern wouldn't be liable. Warehouse companies don't guarantee that goods deposited by a borrower are legally that borrower's property. Though the depositor certifies that this is so, the warehouseman has no way of being sure. Nor does the warehouseman guarantee that the goods deposited are of the

Experimental model made of Vibrin polyester resins and glass fibers by Glasspar Company, Costa Mesa, California

What would happen if somebody made...

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Plenty—and all of it good! Look what happened when they made an all-plastic body of Naugatuck Vibrin polyester resin and glass fiber laminates.

No more wrinkled fenders! You just can't dent this car! After an impact that would crumple any ordinary fender or door, this amazing material springs right back to its original shape! It's unharmed except by the heaviest of impacts.*

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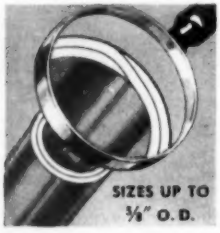

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grade specified, unless special arrangements are made for grading.

• **Special Use**—Another application of field warehousing has developed quite rapidly since the war. Some manufacturers have found ways of using it to help distributors expand sales of their product, while safeguarding themselves against bankruptcy of distributors.

One way to do this is to have a field warehousing company set up a warehouse on the distributor's premises. The manufacturer gets receipts for goods he ships there. This has the advantage of getting goods out of his own warehouse and close to the point of sale. As the distributor gets orders, he pays the manufacturer, and goods are released from the warehouse.

The best arrangement, from the manufacturer's standpoint, is to have the distributor arrange with his local bank to finance their purchase on a warehouse-receipt basis. This gives the distributor the funds to take his cash discount. And the manufacturer is completely off the hook.

Tax Hazards

When they're dealing with stockholders, closely held corporations run a risk of losing tax privileges.

Taxwise, a small corporation controlled by one person or by a small group stands in a twilight zone. Such a closely held corporation is in name and form a corporate entity, but the tax law isn't bound by names. It sometimes insists on treating the corporation as the investment and management of one man, of an actual partnership, or of a family.

Three danger points arise in operation of a closely held corporation:

• Are advances of cash to the corporation genuine loans or actually capital investments?

• Under what conditions can the corporation claim a deduction for payments to a creditor who is also the controlling stockholder?

• What happens when a majority stockholder sells property to the corporation he controls?

Here is a case decided by the tax court a year ago. Five members of a family bought an 83-apartment building. They were advised to form a corporation. Each loaned the corporation from $5,000 to $30,000, totaling $75,000, and bought stock in the same ratio as his loan bore to the total. There were 15 shares at $5 each, a total of $75, making a 1,000 to 1 ratio of indebtedness to capital stock.

The building was acquired for

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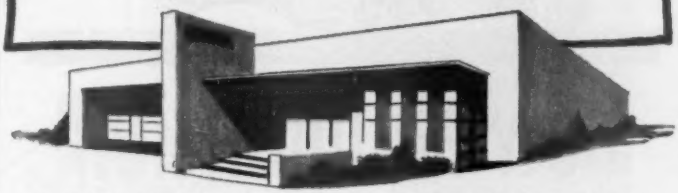

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We operate on the belief that, *for each particular adhesives application, there is one adhesives formula that can serve you best.*

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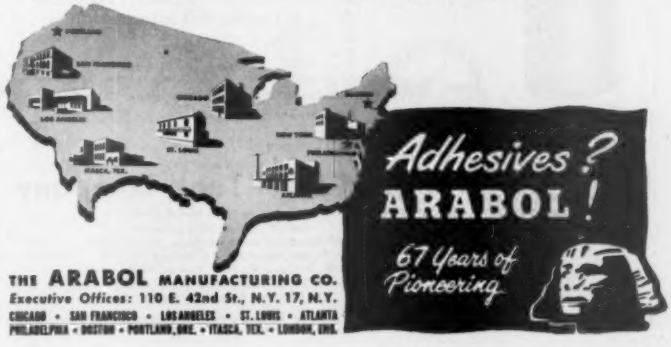

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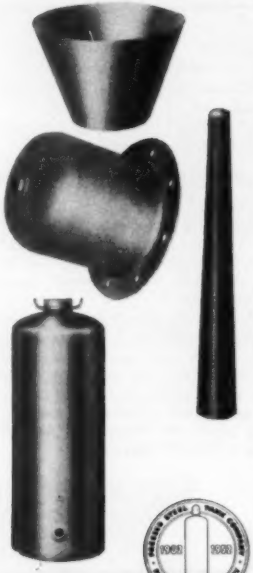

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$75,000 down payment and a $363,200 mortgage, as planned. The corporation had gross profits of about $70,000 for its first four years. Because it deducted $4,500 a year interest on the $75,000 loan from the owner-stockholders, the company escaped tax entirely for the first three of these years.

The Bureau of Internal Revenue protested the $4,500 a year deduction, and was upheld by the tax court. The court ruled that the "loans" by stockholders were really capital investments.

• **Added Loss**—It makes a big difference to the stockholder, too, whether his loan is a real loan or a capital investment. If the corporation fails with the money still unpaid, the stockholder can claim a fully deductible loss if his advance of cash was a loan but only a maximum deduction of $1,000 a year for capital loss if it is considered an equity investment.

How a court rules depends on the facts in each case: whether the money was to be repaid in any event or whether it was being placed at the disposal of the business as risk capital.

Ordinarily a taxpayer corporation on an accrual basis may deduct current interest and other expenses even though the amount is actually not paid by the end of the tax year—and even though the recipient, on a cash basis, is not required to report it as income in the same year.

Where this occurs between a corporation and a controlling stockholder, however, the tax law specifies that the accrued amount must actually be paid within the year or within 2½ months after the close of the year. This applies where a stockholder—and his spouse, brothers and sisters, ancestors, and lineal descendants—directly or indirectly holds more than 50% in value of the outstanding stock.

• **Definition Trouble**—The purpose of this provision is to make sure there is no deduction by a closely held corporation without a corresponding inclusion of taxable income by the recipient. But the courts have run into trouble trying to decide what "paid" means.

At first, the courts held to the literal meaning: to liquidate a liability in cash. Then came the Musselman Hub-Brake Co. case, in which the corporation had satisfied a debt for patent royalties and interest to its controlling stockholder by giving him interest-bearing demand notes within 2½ months after the close of each of three tax years. The creditor-stockholder reported as income the par value of the note received by him each year.

The tax court denied the corporation a deduction for the claimed expense, but the Court of Appeals ruled in the company's favor. It construed the intent of the law to mean that debts were

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Edward Henderson, M.D.
Secretary

SCHERING CORPORATION
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★

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See page 130 of this issue for the Clues section.

paid when the creditor received actual or constructive income, reportable for tax purposes. This can be in the form of notes, property, or credits.

• **Exception**—The tax court has since permitted corporations to deduct such payments without much question. There are exceptions, though.

In the H & H Drilling Co., Inc., case, the corporation issued a salary check to its majority stockholder, who immediately endorsed it and returned it to the company. When the corporation offered no evidence to show it had enough money in the bank to cover the check, the tax court ruled that no actual or constructive payment had ever been made, and it therefore denied a deduction.

As with sales between members of a family, sales between a stockholder and his controlled corporation get rough treatment from the tax law. It's a "heads we win, tails you lose" proposition: You can't deduct a loss on a sale but any profit is taxable. This applies to the stockholder defined as in the previous section.

• **Gone Forever**—In a sale between a corporation and its controlling stockholder, a loss is similarly gone forever, as far as tax deductions are concerned. Here's how the loss takes wing:

The stockholder's cost for a property is $15,000; he sells it to his controlled corporation (he and his family own more than 50% of stock value) at its current market value, $10,000. He cannot deduct a capital loss of $5,000. The company's cost remains what the purchase price was: $10,000. So any subsequent sale by the corporation at that figure shows no capital loss either, although somewhere along the way the property depreciated $5,000.

Furthermore, no sale or exchange of depreciable property between a corporation and a stockholder results in capital gain treatment if the stockholder, with his spouse, minor children, and minor grandchildren owns more than 80% of the value of outstanding stock.

This provision was added to the law in 1951 to plug this kind of hole: Mr. and Mrs. Doe own all the stock of X Co., Inc.; they also own the building that X Co. occupies. Book cost of the building is $20,000, with a depreciation deduction of $1,000 a year. Mr. and Mrs. Doe sell the building to X Co. at its fair market value of $36,000.

Under the old law, Mr. and Mrs. Doe could be taxed no more than $4,000 on their $16,000 capital gain; the corporation would have a book cost of $36,000 for the building, a depreciation deduction of $1,800 a year.

Under the new law, the company still gets a $800 additional allowance for depreciation, but Mr. and Mrs. Doe have to pay ordinary, not capital gains, rates on their $16,000 profit.

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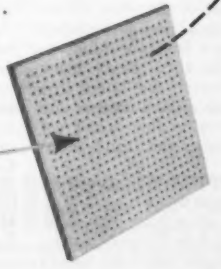

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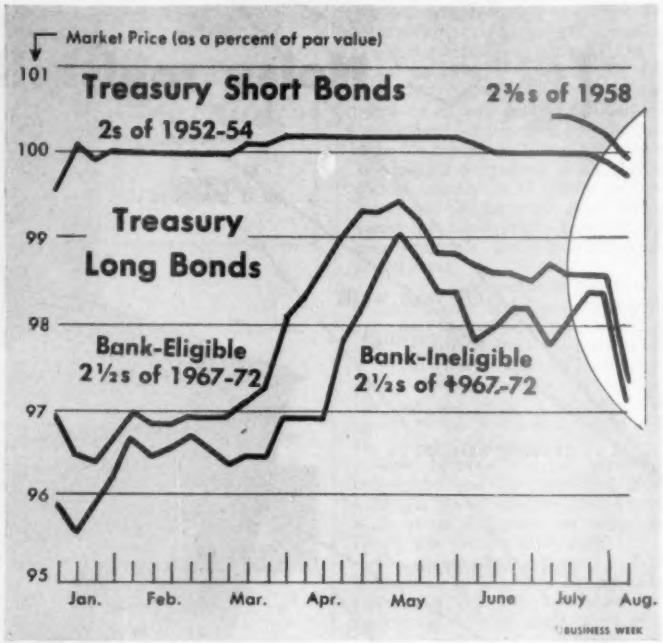


Money Tightens: Bonds Sag

This week's break in the bond market (chart) is pretty conclusive proof that the Federal Reserve System has a fairly free hand as the manager of the U. S. money supply. It wouldn't have happened if the Fed weren't anxious to prevent inflation of bank credit.

• **The Ride's Over**—The Fed is allowing money to get so tight that some buyers of the recent $4.2-billion issue of 2⅜s (BW—Jun.28'52,p128) who borrowed the purchase money from banks in the hope of selling at a profit, now have to pay as much as 3% on their loans. This is forcing some of these would-be free riders to dump their bonds.

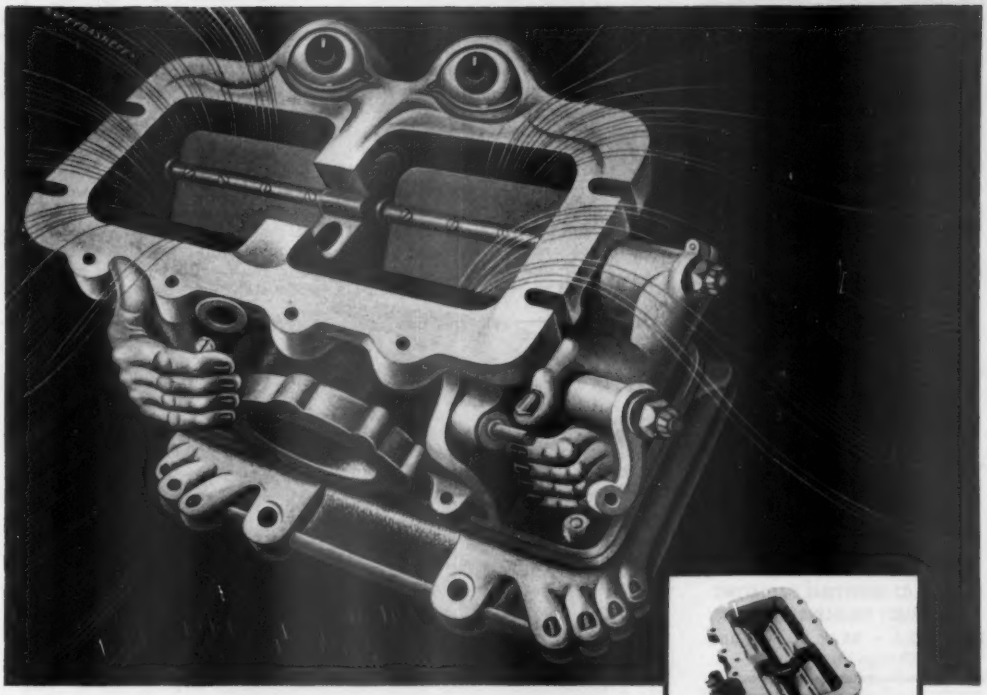
That's only part of the story. With money so tight, banks and government-bond dealers don't have the funds to buy securities. So there aren't many takers for the relatively few bonds that are being offered. Many dealers are cutting their prices so they won't get loaded with securities they can't afford to carry.

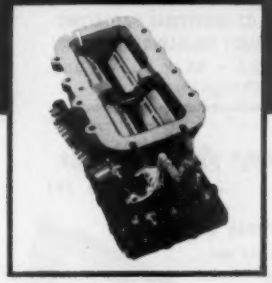
• **Easy Matter**—It's very simple for the Fed to keep money tight, under present conditions. All it does is go slow on buying government securities in the open market. Right now, the banks are having a very hard time maintaining their reserves with Federal Reserve banks. They must carry these reserves in direct ratio to their own deposits. When a bank makes loans it creates deposits. So its ability to make loans depends on the amount of reserves it has with the Fed.

It can build up these reserves by selling governments to the Fed, if the central bank will take them. Back in the days of fixed pegs for government-bond prices, getting reserves was automatic. The Fed always bought bonds at the pegged price.

But since July 1, when subscribers to the new 2⅜ issue paid up, bank reserves have been hard to come by. For one thing, the banks probably financed half or more of the issue, either through direct purchase or through loans. That increased their deposits, and hence their reserve requirements. Furthermore, the Treasury has been withdrawing its deposits from banks during July faster than it has been spending money. That drains away bank reserves.

• **A Trickle**—The Fed has been supplying bonds with only a trickle of reserves by buying government bonds. Instead, it's been forcing banks to get





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most of their additional reserves by borrowing from it. Since these borrowed reserves are only temporary, the banks must let their short-term loans and investments run off, to repay their borrowings. Besides, no bank likes to be in debt. That's why the interest rate on recent Treasury 91-day bill offerings has climbed from 1.6% to over 1.8%. Bank demand for them has sagged.

• **Hands Off**—The Treasury has made two announcements which clearly indicate it's not going to challenge the Fed's control of credit:

• Last week it said it would refund about $2.4-billion of maturing 1⅞% certificates, with 2% certificates.

• This week, the Treasury said it would not call for redemption of four bond issues totaling about $16.5-billion, which can be called Dec. 15 but don't have to be redeemed until later. Coupons on these bonds are 2% and 2½%. The Treasury figures that it would cost too much in interest to refund the bonds this year.

It was the second announcement that touched off this week's break. But at midweek, the Fed appeared to be stepping in to see that prices didn't drop too rapidly. Prices of many issues were stiffening.

First-Half Dividends Hit New High

Thus far the downtrend in earnings experienced by many companies this year (BW—Aug.2'52,p27) hasn't affected dividends generally. Payments are still climbing as before.

First-half cash dividends on New York Stock Exchange listed commons added up to $2,587,164,000, 4.8% greater than the previous first-half record in 1951.

As the Big Board's tabulation below indicates, close to 88% of all listed commons paid dividends, and 27% of the dividend payers even increased them.

• **Spotty**—Nonetheless, while dividends were up 4.8% in the first half, the first quarter was much better than the second. In the first quarter, dividends perched at a level 6.6% higher than the midyear point. What's more, eliminate the oil and utility shares and you'll find that the half-year's total barely equaled that of 1951.

So keep an eye on dividends of the oils and utilities. Though they accounted for only 15% of all this year's dividend payers, they actually provided 34% of the over-all dividend total. That means that if either group starts to slice its stockholder disbursements sharply, it could make quite a difference where the dividend total is concerned.

Stock Group	*No. Issues in Group*	*No. of Dividend Payers*	*Higher*	*Same*	*Reduced*	*Total First-Half Dividends (000 omitted) 1952*	*1951*	*% Change 1952 vs. 1951*
Aircraft	26	19	10	7	2	$20,040	$19,086	+ 5.0%
Amusement	23	16	1	13	2	28,824	29,654	− 2.8
Automotive	73	63	13	38	12	265,517	276,868	− 4.1
Building trade	30	29	9	17	3	28,989	28,172	+ 2.9
Chemical	83	78	26	44	8	274,310	275,688	− 0.5
Electrical equipment	23	21	3	16	..	74,078	66,978	+10.6
Farm machinery	7	7	3	3	1	31,878	27,720	+15.0
Financial	32	28	11	15	2	42,703	39,675	+ 7.7
Food products, beverages	69	63	10	38	15	100,853	108,913	− 7.4
Leather, leather products	11	8	..	7	1	9,764	9,498	+ 2.8
Machinery, metals	105	98	32	55	11	88,844	84,133	+ 5.6
Mining	42	34	11	19	4	95,177	89,959	+ 5.8
Office equipment	10	9	4	5	..	16,142	15,388	+ 4.9
Paper, publishing	36	32	16	10	6	49,109	43,192	+13.7
Petroleum, natural gas	49	46	27	18	1	440,813	346,824	+27.1
Railroad, railroad equipment	81	62	15	43	4	129,412	120,383	+ 7.5
Real estate	10	9	3	5	1	8,178	7,205	+13.5
Retail trade	71	65	10	45	10	123,498	142,772	−13.5
Rubber	9	9	6	3	..	24,121	18,150	+32.9
Shipbuilding, operating	10	8	1	6	1	6,388	5,976	+ 6.9
Steel, iron	38	34	5	24	5	117,957	115,305	+ 2.3
Textile	44	37	3	21	13	39,847	49,012	−18.7
Tobacco	16	15	2	9	4	40,224	39,474	+ 1.9
Utilities	101	94	24	69	1	426,816	379,392	+12.5
U. S. Co.'s operating abroad	25	16	5	8	3	33,600	37,251	− 9.8
Foreign companies	18	12	5	5	2	51,763	51,099	+ 1.3
Other companies	18	17	4	12	1	18,319	17,121	+ 7.0
Totals	1,060	929	261	555	113	$2,587,164	$2,445,335	+ 5.8%

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BOOKS

A Challenge to Management

In his new book, Clarence Randall calls on businessmen to get out and argue in defense of free enterprise.

Businessmen usually don't take too kindly to criticism. In that respect, they are no different from other groups. You might expect, though, that their hides would be pretty tough—since they have been lambasted by so many of their critics.

Now they are undergoing an unusual experience. They are getting a scolding from one of their own brethren. The new critic is hard-jawed, severe-looking Clarence B. Randall, president of Inland Steel Co. He speaks out clearly and sharply in his book, A Creed for Free Enterprise (Little, Brown & Co., $2.75). An abridged version was syndicated to newspapers earlier. Little, Brown reports that there have been two printings so far and that a third one is going to press.

At Inland offices, thousands of letters have been received commenting on Randall's TV talk answering President Truman, his stand on the union shop, and his book. About 400 have been exclusively about the book—most of these were favorable, but not all of them.

• **Self-Castigation**—The jacket of the book proclaims that this work is "a ringing statement of faith in the American system of free enterprise by the most trenchant spokesman for our heavy industry." And that is true. Randall does express confidence in the free enterprise way of life. But he also takes himself apart for not always having been a better apostle of that faith. Furthermore, he takes some punches at the shortcomings of some of his business contemporaries.

• **Every Tool But Language**—The thing that worries Randall most is the feeble performance of men in industry in saying what they think and believe. He contends that they should take every opportunity to speak out whenever people will listen.

"We are not doing that now," he regretfully comments. "We have learned how to use every modern tool except language, yet that is the tool our enemies use best." He refers to the Socialist planner's glib talk—a new phenomenon for which he says we are not psychologically prepared.

Randall points out that the men who know business best—the businessmen themselves—are good salesmen and can get quite evangelistic about their product in talking to customers. That kind of enthusiasm disappears, though, when the suggested audience is a convention of the League of Women Voters, or a congressional committee.

INLAND'S Randall contends that industry should speak out at every opportunity.

Some hope for the future—with a dour overtone—is held out, though. Randall says: "The next generation of businessmen will be articulate, knowing what they believe and entering joyously into the battle of ideas, or there will be no business as we have known it heretofore."

• **Self-Imposed Task**—Evidently the writing of this book was part of the self-imposed discipline prescribed by Randall. He makes it clear, too, that what he has written is a purely personal expression and is not to be considered in any way a statement of the views of Inland Steel Co. nor of the management staff of that company.

Authoring a book was not a wholly new experience for him. In 1938, he collaborated with political reformer Roger Baldwin on Civil Liberties and Industrial Conflict.

• **Industry Spokesman**—As a Chicagoan, he has a good record for participation in public and community affairs. As a member of the National Assn. of Manufacturers, he has done his share of needling to get freer, perhaps more "liberal," expressions of opinion. As a steel boss, he has certainly been less conservative than most of his associates in that industry.

Even so, he was the one selected to give the industry's answer to the recent steel seizure by order of President Truman. Randall pulled no punches, telling a nationwide radio and television audience exactly what he thought of Truman and what he had done in dealing with the steelworkers' union. The reaction to what he said was not unanimous. Some thought he was 100% justified in what he said and how he said it. Others wondered if that kind of verbal bombast was the most appropriate thing under the circumstances.

• **Still Fighting**—Randall sticks by his guns. A week before the steel strike was finally settled, he was as adamant as ever. And he insisted that his position and that of the majority of the steel industry in fighting against the union shop was gaining support. "Everyone now knows," he said, "that the steel controversy has boiled down to one single question: Should an employer bargain away the right of a workman to a job if that man does not wish to join the union? Inland is being urged to stand fast and not sign a contract that will prevent a nonunion man from working."

The steel executive has quite a reputation for crisp talk. Once when he was asked innocently how much export business Inland did, his eyes narrowed down at the questioner to whom he gave this reply: "Now, why do you suppose we chose the name 'Inland'? Of course, we have no export business."

He can show up others when he feels a selling job should be done, even when it does not involve the selling of steel. One time, when a vice-president of his company said he would not be able to see a noncustomer visitor, Randall was asked if he could suggest someone else to handle the situation. He did it by seeing the visitor himself.

• **Coverage**—In the book, Randall unreels a lot of his views. He may disappoint the diehards when he says that the unions are here to stay. But he will draw cheers for the way he pulls out all the stops in condemning industrywide bargaining and the use of government fact-finding boards.

Although Washington is one of his favorite targets, he also twits businessmen for not taking a more active part in public life. His description of his own enlightenment about government is interesting. He calls himself "one of the most ignorant" when he became the first steel consultant for ECA in Europe.

It seems quite obvious what Randall's fond hope is: that what he has said will be the detonator for many other expressions of opinion by businessmen and their present enemies.

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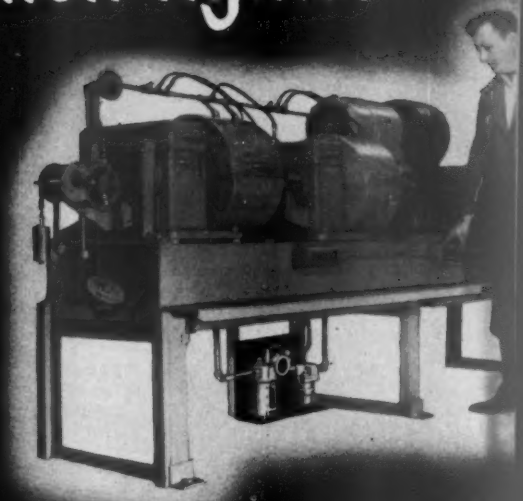

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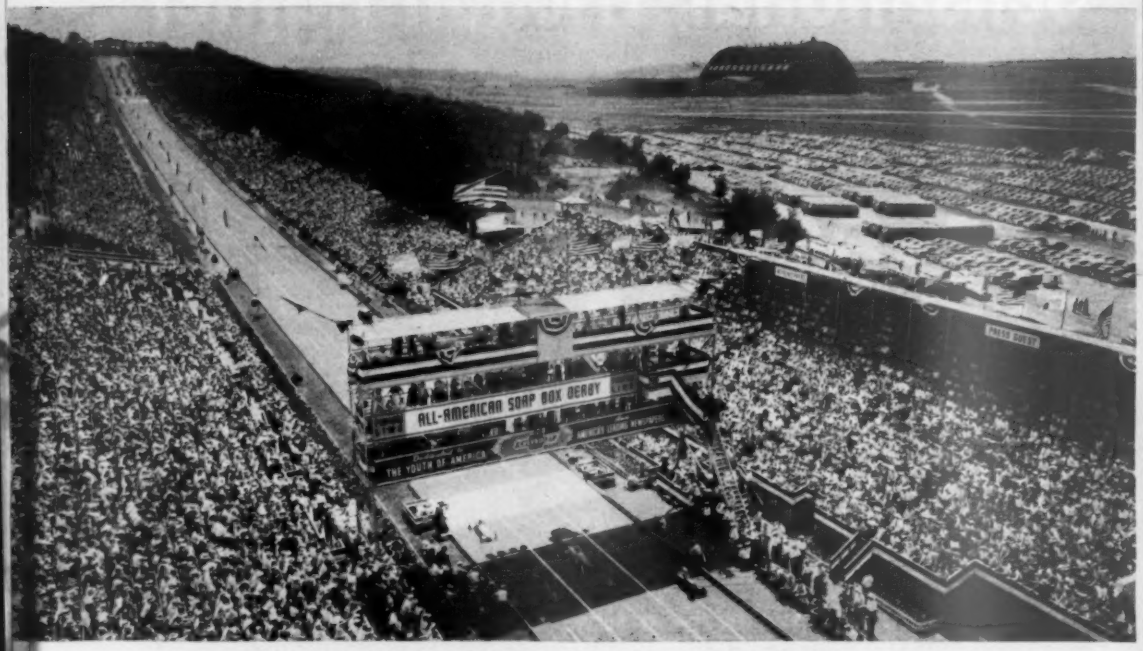
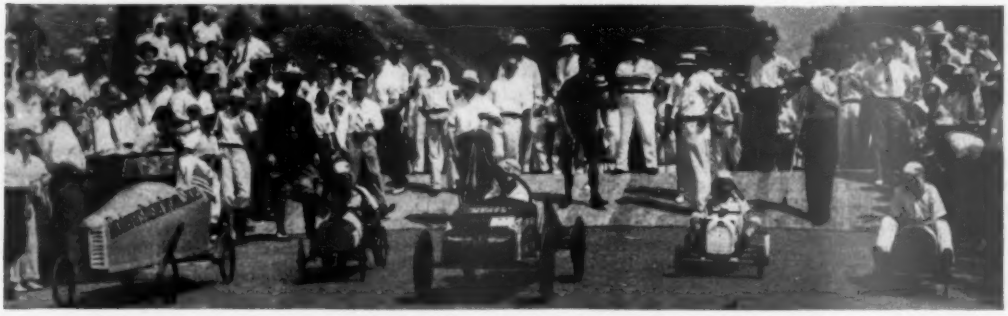


CHEVROLET has sponsored the annual derby since 1935, working on the theory that the boys who are participating today will be buying cars tomorrow. The company also gets the goodwill of the boys' parents.



EARLY MODELS such as these of the relatively informal 1934 derby were governed by very few rules. Today, cars must cost less than $10 to build; car and occupant together must weigh less than 250 lb.

Soap Box Derby: Long-Range Publicity

This weekend, the 15th annual Soap Box Derby—the biggest yet—is being run off in Akron, Ohio. When it's over, everbody except a few hard losers will be happy.

The kids will have had a good time. Civic leaders will have seen the kids working at a constructive hobby. Spectators will have watched a good show. Akron charities will pocket the gate receipts. And Chevrolet Motor Division of General Motors Corp., which sponsors the event, will sit back and reap the benefits of an effective, time-tested promotional idea.

The first derby was run in 1933 at Dayton, Ohio, by a local newspaper. Chevrolet took over in 1935, two years later moved the event to Akron, where it has been held every year since except during the war. In the years Chevrolet has sponsored the derby, the company has spent $6-million on it.

• **Why?**—Off-hand, it might seem that a maker of bicycles would be more likely to sponsor a soap box derby than a maker of automobiles. The basic ap-

PROFESSIONAL TOUCH shows up as champions of each city parade down the three-lane track before national eliminations begin. Banners, uniforms, helmets are supplied by Chevrolet and co-sponsors.

IN 1933 the year of the first derby, most of the glamor was missing. Myron E. Scott, then a newspaperman, started the idea. He now works for Chevrolet.

Project

peal of soap box racing is to gradeschool boys—who won't be car buyers for several years.

But Chevrolet doesn't think its money is wasted. In the first place, the derby does appeal to adults—not only to those who secretly wish they were driving soap boxes themselves, but to parents and civic organizations who appreciate anything that's done to keep kids out of mischief. Equally important is the long-range aspect of the scheme: The boys who are participating in the derby now are getting to know Chevrolet, becoming conscious of the brand name. When the time comes for them to start shopping around for automobiles, Chevrolet promotion will have a head start on that of its competitors.

Chevrolet's name appears throughout the derby and the pre-derby preparations—but it appears unobtrusively. To enter the event, the boys aren't required to send in a Chevrolet hub-cap or write a 25-word statement on why they like the company. All they have to do is register with a local Chevrolet dealer.

• **Big Operation**—The Soap Box Derby is a year-round activity at Chevrolet. In fact, the company has formed a separate command to take care of it—All-American Soap Box Derby, Inc. Mentor of derby promotion is Myron E. Scott, who originated the idea in 1933 while working for the Dayton Daily News, went over to Chevrolet three years later and took charge of the affair from then on.

Work on any year's derby starts the year before. About 1-million copies of the rule book—revised each year—are printed in December. At the same time, cities throughout the country are signing up for local franchises. To get a franchise, a city has to have a daily newspaper; it has to guarantee a safe track, be able to round up at least 40 contestants, comply with other rules set up by the derby committee.

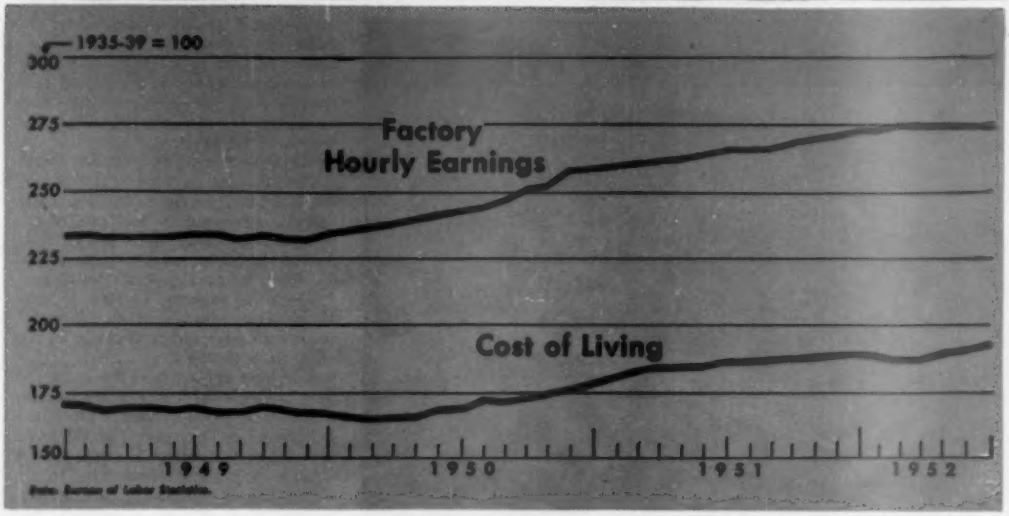
This year, 155 cities have signed up, including two from Canada, one from Alaska, and one from U. S.-occupied Germany. This is the largest entry yet, beating 1948's record by two.

Each city's derby is sponsored by local companies—who get in their promotional licks along with Chevrolet—or by civic groups such as Elks, Knights of Columbus. Winners of the local races go to the big derby at Akron. Their fare is paid by local sponsors; once they're in Akron, Chevrolet picks up the tab.

• **Derby Day**—When the big day comes, Akron looks like a political convention city. Some 60,000 spectators are expected this year. Special telephone and telegraph wires will operate continuously for derby officials, newspapers, radio stations. (Last year, Western Union handled 120,000 words under the grandstand on race day.)

The actual running of the races is a marvel of precision. The average heat takes 28.5 seconds. Precisely at 2 p.m. the first heat takes off. Thereafter, heats are run at 90-second intervals, with alternate fast and slow schedules (60 and 105 seconds) to take care of the unforeseen. At exactly 7 p.m. the boys assemble for a banquet, which is over at 9:58. Habitues of the track say that this schedule always runs on the nose.

First prize, given by Chevrolet, is a $5,000, four-year college scholarship. Other promotion-minded companies supply some of the other awards.



Why Labor Front Is Still Jittery

The sudden upturn in the cost of living is one reason why steel settlement hasn't brought peace as expected; the steel industry is having trouble writing formal contracts.

Just about every one expected a period of calm—even though a limited period—to settle on the labor front when the steel strike ended.

That hasn't happened. A number of events have conspired to prevent it.

Most important of all is the latest news of the cost of living (chart above). It's at an all-time high. What makes this important is the opinion in labor circles that the index is in a new phase of rapid rise—fueled by the new price level in steel, which will raise the cost of manufactured products, and the drought in agricultural areas, which will raise the cost of foodstuffs.

• **Frantic Note**—Such estimates have introduced a frantic and urgent note into contract negotiations which should now be tending toward settlement at around the figures agreed on in steel (BW—Aug. 2'52,p99). Arguments are going on in a large number of industries in which, as recently as a fortnight ago, no great problems were expected—in electrical manufacturing, rubber, nonferrous mining and smelting.

Then, of course, there is coal; still an area of low pressure but an incubator of disquieting rumors (page 101).

• **Steel Itself**—Most unexpected of all, however, steel itself is still unsettled. Once the six big companies had initialed the memorandum of agreement which Ben Fairless and Phil Murray wrote in the White House, it was widely assumed that all the other producers would fall in line and that drafting detailed contracts would present no difficulties.

That has not been the case. Of the big six companies, Inland was the only one which, by midweek, had signed a formal contract with the CIO.

Jones & Laughlin stayed struck until this week over a dispute involving reduction of the work force. The company resumed operations under an "interim" agreement on a day-to-day basis, with either party free to terminate it on notice.

Allegheny Ludlum and Acme Steel remained strike-bound.

All the others worked without formal contracts as negotiations continued.

• **Issues**—The principal negotiations were going on in Pittsburgh between the union and U. S. Steel. Two issues loomed large in the discussions: the controversial "management rights" clause, and incentive wages. The incentive matter was so explosive that Murray and Fairless agreed to bargain it out between themselves and not leave it to committees.

The "management rights" question was soft-pedaled, but never forgotten, during the long strike.

In the Pittsburgh sessions this week, U. S. Steel negotiators continued to bargain seriously and with apparent determination for a contract clause which would enlarge management authority and specifically affirm management rights.

Basically, the negotiators seem to be fighting over company authority to change, rearrange, and redefine jobs. No one has a very clear idea of how many job classifications or employees would be affected if management exercised such authority without check or challenge from the union.

The company says such authority is essential for efficient and economic operation. The union says it is a union-undermining device. There the discussions are snagged, with every passing day and every new conference inflating the symbolic importance of the issue.

• **Jittery**—Observers are apprehensive that—like the union shop issue—management rights may become a "who's gonna win; who's gonna lose?" affair. No new strike outbreak in steel is around the corner; the memorandum of agreement which sent most of the strikers back to work provides against another strike or lockout until next June. But the difficulty in cleaning up unfinished business speaks volumes about the jittery nature of today's labor front.

THE LABOR ANGLE

NEW YORK, perhaps the most highly unionized city in the U. S., has been witnessing scenes the like of which have not been seen for over a decade. Massed pickets are patrolling its congested garment district. The police are out in force. And the singing and chanting on the streets and sidewalks is reminiscent of the '30s.

The International Ladies Garment Workers Union, AFL, is engaged in organizing that 10% of its industry in New York which is still unorganized.

Other things being equal, the prosperous, secure, and respectable ILGWU—often referred to as America's model labor union—would not be reverting to the brawling days of its youth. Like Philip Murray's union in steel, it could get along fine with a tenth of its industry not under contract. But other things are not equal. Unlike steel, where the companies not signed with the CIO don't undercut the union firms, the garment industry is racked with bitter price wars for the market.

Goaded and pressed by employers it has under contract, the ILGWU must undertake an organizing job—the real object of which is to take wages and labor standards out of competition in the interests of the unionized firms.

This explains why a group of the employers who are targets for the union's organizing have filed an antitrust suit against ILGWU, three manufacturers' associations, and the industry's impartial chairman, naming them all as conspirators to monopolize the $600-million industry.

THERE aren't many U. S. industries in which such litigation would even be contemplated. It is unlikely that this particular suit will ever go to trial. But the charges made in it illuminate one important facet of union-management relations. That is this:

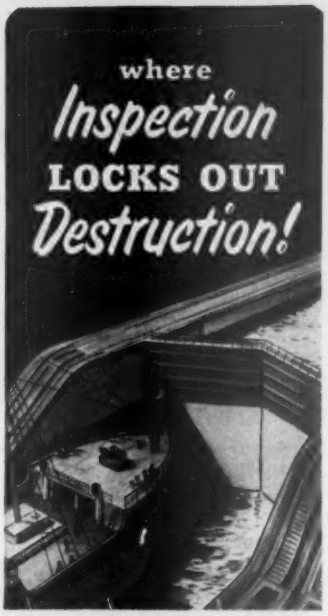
Certain types of U. S. unions become powerful supports for employers. When a labor organization is strong, accepted in its industry, and unworried about surviving, it begins, almost inevitably, to think of the needs of the business it deals with. When it is, like the ILGWU, wealthier, more resourceful, more stable, than almost all of the employers in its industry, it takes the lead in furthering the industry's interests. It becomes, in short, senior partner in the union-management relationship.

BEGINNING with the NIRA codes, the ILGWU became the principal spokesman for the dress manufacturing industry. Its interests were adequate profit margins and protected markets for its employers. Under price control, the ILGWU carried the ball for satisfactory markups. When a postwar Paris revival threatened to cut into the American dress business, the ILGWU led its employers into establishing the New York Dress Institute and a national promotion program for countering the French competition.

Now the ILGWU shops feel the pinch of nonunion competition in the present buyers' market. And the ILGWU is stirred out of its preoccupation with politics, health centers, philanthropies, and civic enterprises to take up the club as policeman for its industry.

To fully appreciate the profound change ILGWU has undergone to become—as the jeering Communist song characterizes it—"an agent of the bosses," it must be recalled that the organization started out completely wedded to a Marxian, anti-capitalist ideology. Today, in the Marxian jargon that once was its mother-tongue, the ILGWU is a leading "class collaborationist" organization.

COULD it happen to every union? No. The economics of the dress industry is something almost exclusive to the needle trades. No matter how big and strong the steelworkers' and auto workers' unions become, it is inconceivable that they could dominate and determine business policy for such corporate giants as U. S. Steel and General Motors. Ultimately they may become partners in their relationships, but not senior partners. Meanwhile other unions, bracketing between the needle trades and steel, are often very useful to their employers in promoting products, getting business, cultivating good will, and lobbying in legislatures.



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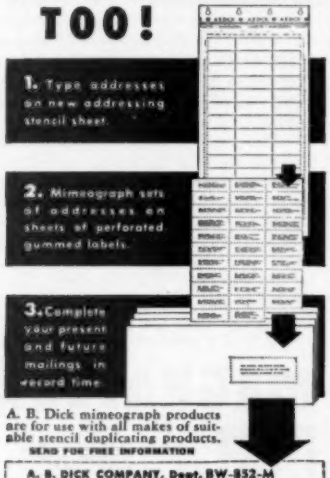
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Truck Squabble Goes to Court

Teamsters' union tried to block shipment of trailers by railroad. The New Haven is suing for $100,000 damages for inconvenience and loss of business.

Truck trailers belong on roads, behind a teamster-driven tractor unit, not on railroad flat cars, says AFL's job-jealous teamsters' union. As a result, the union is embroiled in Massachusetts courts with the New York, New Haven & Hartford R.R., which has pioneered since 1937 in hauling trailers.

In the legal actions:

• The railroad charges Boston Local 25 of the International Brotherhood of Teamsters, Chauffeurs, Warehousemen & Helpers (AFL) with a secondary boycott in picketing the carrier's Boston yards to prevent the loading of trailers on flat cars. The railroad asks $100,000 damages for inconvenience and loss of business.

• The union argues that pickets were at the gates of the yards due to a bona fide labor dispute with trucking employers. It wants a restraining order against picketing thrown out, and asks to have the dispute transferred from state courts to the National Labor Relations Board.

• **Wider Implications**—Although it's a local fight, the squabble has national importance. During the last few years many railroads have adopted the trailer-on-flat-car service, and there are also trailer-on-ship variations on the West Coast (BW—May17'52,p128) and the Hudson River. What is happening in Boston will be precedent for other roads and teamster locals.

• **The New Haven**—Concerned over the loss of freight to truck lines, the New Haven worked out a then-novel plan 15 years ago: Combine truck trailer and rail transportation, it suggested to shippers and truck lines. It pointed out that considerable savings—and closer adherence to schedules—are possible if the loaded trailers are hauled by train over the longest portion of trips. A big whack is taken out of driver costs and out of wear and tear on equipment.

As the trailer-on-flat-car service took hold, the New Haven invested $1.6-million in 200 special cars. During 1951, the road carried 22,894 trailers, for a gross revenue of $880,000. Early this year, loadings at Boston were averaging 50 a day.

• **Union Unhappy**—The teamsters' union never took kindly to the New Haven's piggyback service. For every trailer moved by rail, a teamster truck crew misses an over-the-road run.

Worried about jobs, the union first made a futile stab at insisting drivers accompany the trailers on the rail trip. Then it tried to get employers to agree, by contract, to limit the number of trailers moved by rail. Employers balked, although many are reported to have informal agreements providing that, say, only one in seven trailers can be put on a flat car.

• **Flare-Up**—A while ago, Boston Local 25 checked its membership, found 30% unemployed, and blamed the trailer-by-flat-car service. It ordered picketing.

Local 25's contracts with employers bar the use of pickets or any other pressure tactics in a dispute during the life of the contract—to April, 1953. All disputes must go to arbitration, something the teamsters didn't want in this issue.

Barred from picketing employers' trucking terminals, the union tried the next best thing. It picketed the railroad loading yard—thus effectively blocking access of truck trailers to rail flat cars.

The local carefully made clear that it had no direct argument with the New Haven, and wasn't trying to induce railroad workers to strike in sympathy (they didn't). The teamsters also said they weren't trying to interfere in any way with regular rail operations. They merely wanted, they said, to prevent trailers being hauled into the yard for loading on flat cars—a move not against the New Haven but indirectly against employers.

• **Court Ruling**—Whatever the union's reason, a state court held on July 14 that the union strategy must be considered an illegal secondary boycott. It enjoined the local from further picketing at the New Haven yards.

LABOR BRIEFS

Non-Communist oath in the Taft-Hartley act "is serving no useful purpose," according to a staff report to a Senate labor-management subcommittee. The staff wants the oath clause cut out since leftwingers get around it anyway. The staff also suggested that ways be sought to speed the National Labor Relations Board's case handling.

•

A work-week cut sought by New York breweries and their union is O.K., says WSB, provided there's no boost in weekly pay. The board has told the parties they can either cut the work

week from 37½ to 35 hours without reducing present weekly pay, or raise hourly pay 10¢ without reducing weekly hours. Parties wanted to do both (BW–Feb.16'52,p48).

•

Monopoly practices are the charge against lathing and plastering unions in Chicago in a government injunction petition filed last week in U. S. District Court. The legal action is a follow-up on antitrust indictments recently leveled against the two unions and associated employer groups (BW–Jul.19 '52,p118). The labor groups are charged with barring out-of-state contractors from work in Chicago.

•

One-year strike at the Whippany Paperboard Co., of Whippany, N. J., ended last week when 800 CIO employees took a 10¢ raise–a compromise between the 16¢ they struck for and the 4¢ offered by the company. Their union urged acceptance.

•

Apprentices learning manual skills that require at least 4,000 hours' work experience may now be exempt from the draft. A recent executive order, long deferred, authorizes exemptions in an attempt to help fill needs for skilled craftsmen.

•

New contract covering 19,000 AFL aircraft workers at Boeing Airplane Co. plants provides a 5¢ hourly increase, plus a company payment of $8.65 per month for each employee into a health-and-welfare fund.

Coal Talks Start Amiably

But John L. Lewis hasn't got down to cases with specific demands. His strategy: put pressure on steel-owned mines first—they will need coal the quickest.

Since July 22, John L. Lewis and Harry Moses, who bargains for the Bituminous Coal Operators' Assn., have met almost daily in Washington–alone, without any encumbering negotiating committees. Each time, say the two men who may hold 1952 coal labor peace prospects in their hands, they "just talked about our mutual problems."

Although Moses described the get-togethers as a form of "continuous bargaining," he said this week that Lewis has not yet served any contract demands on the association. From Lewis: "No comment."

• **Friendly Start**–In this way, coal bargaining got off this year to an informal, friendly beginning after Lewis had served a 60-day notice of contract termination on Moses' BCOA (BW–Aug. 2'52,p98). How long the bargaining will remain amiable and informal is still anybody's guess.

Lewis also notified anthracite operators of a contract cancellation on Sept. 30, and served 60-day notices on the Southern Coal Producers' Assn. and other, smaller bituminous operators' groups at the same time–one week later than he sent them to BCOA. The strategy of isolating UMW demands to northern mines, predominantly owned by steel companies is obvious: Lewis hopes to hit a not-so-vulnerable industry in its weakest spot, steel's coal mines, and make a quick deal–then put the deal up to the rest of the industry on a take-it-or-leave-it basis.

Only one thing seems certain: Whatever Lewis demands, he won't settle peacefully for less than the 21¢-an-hour "package" that rival Philip Murray got for his steelworkers from the steel industry after a strike.

• **Possible Demands**–Here are some reasonable guesses on Lewis' 1952 demands:

• He will ask that basic pay be raised from $16.35 to $18 a day–about 20¢ an hour more. This is about the same amount that UMW got as a raise Feb. 1, 1951.

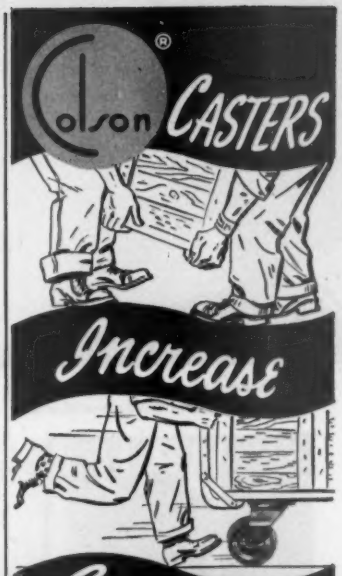
• He will ask for a shorter work week, based on a seven-hour day, without a cut in weekly pay. Before the war, miners worked a seven-hour day. To boost production, they agreed to nine-hour shifts during the war. Afterwards, the work day was reduced to eight hours–although travel-time and other allowances cut actual work time below that. Lewis wants the reduction now to spread work. Miners have been averaging only three and four days a week.

• Lewis will ask for an increase in present $100-a-year vacation pay.

• He will also ask for paid holidays. Now, miners get time-and-a-half if they work on a holiday–nothing if, as usually happens, the mines shut down for the day.

• He will ask an increase in shift differentials–since 1945, they've been 4¢ and 6¢–to the new steel differentials of 6¢ and 9¢.

• Lewis will ask that the per-ton royalty for UMW's health-and-welfare fund be raised from 30¢ to 40¢. The last increase, from 20¢ to 30¢, was in March, 1950. Since then, the cost of benefits has risen; coal output has dropped off.→ Page 102.



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1 The pension check going to a retired United Mine Workers member grows in importance in UMW affairs—and strategy—from day to day as . . .

2 The postman brings in a batch of new pension applications in every mail.

6 The figures on how much is coming in, how much going out, are scanned closely and regularly by UMW health-and-welfare fund officials, who think of the future.

Welfare Fu

Six years ago, John L. Lewis was the hero of his United Mine Workers for his creation of a health and welfare fund fed by royalties on coal output. Today he faces an embarrassment from those riches that may crimp his 1952 bargaining strategy: He hardly dares fight out a long strike that would cut off both his miners' earnings and the fund's income.

• **Granted by Krug**—Former Secretary of Interior Julius A. Krug, running the mines for the government under a seizure order, gave UMW the welfare fund in 1946 over strong protests from mine operators. In doing so, he flatly rejected the idea that the fund should be financed through a per-hour levy on employers. Instead, he said, the fund must be supported by a 5¢-a-ton royalty on coal production.

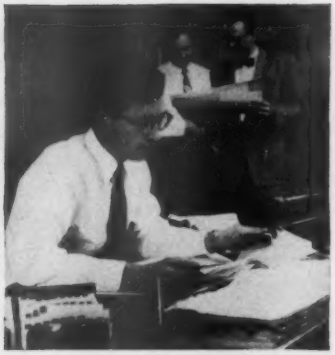
Krug expected loud squawks from Lewis. He got a satisfied smile. Lewis had been mindful that, in the years of mechanization ahead, coal production would rise while employment dropped off. So Lewis had been subtly working for just what he got: a royalty plan.

The shrewdness of his strategy has been demonstrated since then. The fund has fattened on royalties that have risen successively to 10¢, 20¢, and now 30¢ a ton. It has thrived on rising output (production per miner has climbed 29% since 1949 alone) while hours worked have fallen sharply.

Currently, the fund has more than $100-million cached away. That looks like a whale of a big reserve—enough to hold up under whatever strike adventure Lewis might want to undertake. But is it?

• **Heavy Drain**—Certainly the $100-million reserve would pay current benefits for a long time. During the last reported fiscal year ended June 30, 1951,

3 Clerks classify and process each application after a first screening and . . .



4 An official checks it against UMW records. After an application is O.K.'d . . .

5 The first $100 check goes out in bulk mailings, usually a month later.

Fund Needs May Crimp Lewis' Strategy

the fund paid out $79.3-million to 186,150 beneficiaries.

This included $42.4-million in pensions, $27.9-million in medical, health, and hospital services, and $9-million in death benefits and aid for widows and dependent children. Total costs for the year, including administrative expenses, were $82-million, considerably less than the present fund reserve.

• **For the Future**—Fund trustees can't dip deeply into fund reserves. The reason: Because of the industrial group that it covers, UMW's welfare fund faces an increasingly heavy payment load in the future. It must be built up now, when claims are lowest.

From now on, more miners will be retiring. About 56% are over 40 years old. Substantial numbers are over 50 and approaching the pension payoff: age 60 after 20 years' work. So pension costs are due for big annual jumps.

There is little likelihood that health and medical charges will drop. The age of miners, the hazards of their work, and the generally poor conditions in many coal communities lead to a high incidence of disease and accidents among miners. Moreover, the cost of medical services is up sharply.

• **More, Not Less**—Similarly, trustees expect to spend more annually for the rehabilitation program, which has already put more than 1,000 crippled miners back into a useful life. Also, trustees have a $15-million hospital building program in the final planning stage. And they hope in the next few years to add new benefits and boost some of the old ones.

All this is going to require a lot

7 Disabled miner who gets a "cash aid" check from the fund isn't entirely happy over the amount, but . . .

8 Retired miner who gets his $100-a-month check at age 60 after 20 years' work is happier—though pay can stop anytime.

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CLUES

THE MINE WIDOW—although she now gets welfare-fund aid—is a problem currently being studied by trustees. Future plans provide for more help for widows, orphans.

more money than the $129-million or so the fund is getting annually now on the basis of a 30¢-a-ton royalty.

So trustees are now operating on a pay-as-you-go basis—issuing benefits only out of current revenue—against that day, or against any period in which costs might top income due to temporary derangements in the industry.

• **Miners Satisfied**—That's because miners are now mostly enthusiastic over the welfare fund, hence more solidly pro-union than ever. The initial doubtful attitude—the question about why the union didn't fight for more wages instead of the fund—is all but gone.

Miners like Irvin Davis, 72, formerly employed at the Ford Collieries at Bairdford, Pa., now think "Lewis' fund" is a godsend.

Davis and his wife draw $100 a month from the UMW fund, another $65 from social security. That's all they have to live on. But since they own their own small home, it's enough to "get along on, if you don't eat too much beef steak," they say. Before he retired at 70, Davis was making $75 to $80 a week.

There are some 40,000 former miners like Davis on UMW pensions. The only complaint most seem to have is that pensions can stop, or be delayed, at any time.

• **Some Critics**—Miners drawing disability pay, on the other hand, aren't completely satisfied with their lot. John Rednock of Pittsburgh, for instance, draws a typical $40 a month from the fund, and asks: "Can you tell me how they expect a fellow and his wife to live on that?"

Basis of the dissatisfaction of Rednock and others in his situation seems to be that they once collected $80 a month from the fund, later were cut to half of that in an economy move. Rednock asks: "How can Lewis offer $10-million to the CIO (to support the steel strike) when he can't take care of his own people?"

In addition to his monthly income from the fund, Rednock has had medical care—including an operation to enable him to wear artificial limbs—at the fund's expense. He already has one artificial limb, will soon be fitted for another in the rehabilitation program.

The Pictures—Cover by Dick Wolters. Associated Photographers—103 (bot.); Hans Basken—56, 58; Black Star—110 (lt.), 119; Harry Compton—32 (bot. rt.), 33; European—106 (lt.); Int. News—30 (ctr. rt., bot. lt., bot. rt.), 108; N. Y. Herald Tribune—78; Robert Phillips—42, 102, 103; Speed Flying Service—32 (top, bot. lt.); United Press—104; Wide World—30 (top, ctr. lt., ctr. ctr., bot. rt.), 94, 106 (rt.).

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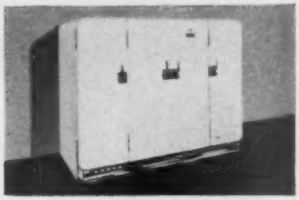

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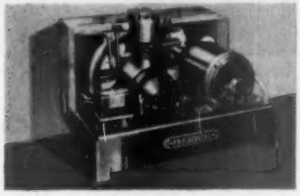

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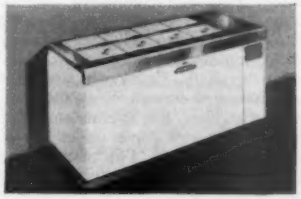

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BUSINESS ABROAD

● Jean Monnet (left), head Schuman planner, faces plenty of trouble before West Europe is smoothed into one happy industrial family.

● The old rivalry between France and Germany will have to be squelched.

● Inefficient coal and steel producers will have to be eased into other industries.

● The roles of the U. S. and Britain will have to be clarified.

The Schuman Plan: All Set to Go

The idea for the European Coal & Steel Community began more than two years ago with a gleam in the eye of French statesmen. It was wetnursed by the most devoted believers in European unity; it grew up during 18 months of often hectic, always delicate, negotiations between former enemies. Now it's ready to step out on its own.

This weekend, the Schuman coal-steel pool's governing body, the "High Authority," starts work at temporary headquarters in Luxembourg. France's Jean Monnet (above)—father of the plan that Foreign Minister Schuman later proposed officially—will probably be in the chair. Six months from now, coal mining in France, West Germany, Italy, Belgium, the Netherlands, and Luxembourg will come under the authority of the pool. Two months later, the six nations' steel industry will join in.

• **Shake-Down**—Even when the coal-steel community—now dubbed "Schumania" by many Europeans—is in full operation, the "common market," the drop in steel prices, the shaking out of inefficient producers won't come overnight. It's a long-run, gradual effort; even if bold decisions are taken promptly, 10 years isn't too long to wait for important results. Meanwhile these immediate problems will have to be met:

• How can the pool dull the rivalry between French and German steel producers, straining to boost their capacities?

• What happens when and if there's overproduction, falling demand, in Europe's coal and steel markets?

• What can be done about the Saar, rich in coal and steel facilities, coveted both by West Germany and France?

• What role will Britain, the U. S., play in Schumania?

Questions like these, plus the myriad technical problems of the pool, often cause outsiders to miss the forest for the trees. They wonder if it can ever work.

Talk to U. S., or Western European observers, about the pool's future and everyone emphasizes the need for "interpretation, intelligent handling, a give-and-take spirit on all sides." So far, that kind of statesmanship has been more evident than absent. If it keeps up, the embryo Schumania might well become—as its founders hope—the cornerstone of a new Europe.

I. Schumania's Acid Test

The nine-man High Authority has a unique job cut out for it. In principle, it must make policy decisions for the Western European coal and steel industries—on pricing, production, investment, research, modernization, tariffs and trade, labor policy. In practice, the authority doesn't have the broad supranational powers that its founders outlined for it. The last word in decisions affecting national policies of the six member nations are reserved to a council of ministers of those nations. The authority executes, administers, and can impose fines and sanctions. But it doesn't have the ultimate power to enforce.

There are other checks and balances. A popularly elected assembly—meeting in Strasbourg in September for the first time—reviews the authority's work, can oust it by two-thirds vote. A seven-man court acts as an appeal body. A consultative committee, with industry, labor, and public members, adds its say.

• **Tariff Bugs**—First job for the High Authority, now sitting down at Luxembourg, is the creation of the pool's "common market." It has to abolish tariffs and quotas in the pool area, then negotiate tariff agreements for the pool as a whole with third countries. The six nations themselves will have to negotiate releases from most-favored-nation clauses in their trade treaties with outsiders. Eventually, there'll be a single tariff wall around Schumania. Within, there'll be free trading in coal and steel.

• **The Issues**—By the end of the year, the High Authority may run into its "acid test." If it takes bold decisions, Schumania will be off to a realistic start. If it ducks, the pool may become

little more than a ponderous supercartel.

The issue revolves around investment, specifically French and German plans for expansion which tend to overlap and compete. Both blueprints include projects based obviously on "political" rather than economic reasoning. The French insist they must increase crude steel output to 21-million tons yearly; the Germans have proposals on the fire that would also boost their tonnage to 21-million tons.

High in German thinking is the fact that they haven't been able to modernize their plant as fast as the French, with their huge infusions of Marshall aid. Germans want to put the big Thyssen works at Hamborn, crippled by Allied dismantling, and the former Goering works at Watenstedt into full operation. The French, of course, are adamant that they keep up with the Joneses across the Rhine.

Something will have to give, and it will be up to the High Authority to decide what.

This power over investment is probably the pool's greatest weapon. While the High Authority can't tell a businessman not to invest in his plant, it can make it tough for him to secure credit in capital-short Europe. Loans from the World Bank, or U. S. sources, will have to be O.K.'d by the authority.

• **Equalization Job**—Another ticklish economic problem looming is the closing down of high-cost, inefficient Belgian coal mines. The High Authority plans to slap a per-ton levy on the more efficient coal producers, hand that over to the Belgians to help them ease through the five-year transition period. Equally uneconomic Italian steel mills will have to make an adjustment, too—either close down or turn to new products, with the help of a pool subsidy. Both projects promise touchy politics for the High Authority.

Pricing will be part of the authority's job, too. It may try to fix maximum prices and allocate consumption in periods of high demand. But the important test would come in a period of slack demand and surplus. Such a crisis would require the High Authority to set production quotas, collect a levy on every ton produced in excess. A tricky point: What will the authority regard as a "crisis"? Another point: What about prices for byproducts, uncovered in the pool agreement, but a large item in profits, especially West Germany's?

Beyond that, the pool governors can crack down on unfair pricing methods, compel competition. Double-pricing, dumping, discrimination, and agreements between producers not judged in the interests of Schumania would be stepped on. Freight rates come under the authority's purview, too.

II. Shadow of the Saar

The "European spirit," of which the Schuman Plan, the European army scheme, and other unity attempts are the first flowering, is a delicate thing. Patience and statesmanship are needed to nurture it—on the part of Western Europeans, and also on the part of Britain and the U. S.

The question of the Saar now hangs heavy over Schumania. Ethnically German, the Saar was taken over by France after World War II. It proceeded to separate it politically from Germany, attach it economically to France. The French case for economic control in the Saar is understandable: With the Saar, France's share of the Schuman Plan's coal and steel production would almost match West Germany's 35%. Without the Saar, the breakdown would be 42% to 27% in Germany's favor. Frenchmen, who dreamed up the coal-steel community to solve the "German problem," couldn't stomach that.

As West German bargaining power has risen in the councils of the West, so has its nationalistic demands on the Saar. Saarlanders talk, think, act like Germans—naturally Germans want it back. Not even a French proposal made two weeks ago, to "Europeanize" the Saar and make it the seat of the coal-steel pool, went down well in Bonn. West Germans, from Chancellor Adenauer on down, regard that as a slick French trick to continue their economic hold on Saar mines and mills forever. The French move has diluted German enthusiasm for Schumania, cast a pall over formal talks now going on in Paris over the Saar's future.

III. Outside Influence

Relations with Britain are another problem of the pool planners. So far London is pretty well up in the air over its role in Schumania. Foreign Secretary Eden last week assured the Continent that Britain supports the plan, and wants "close association" with it on condition that "the process of integration be kept within the framework of the Council of Europe in which Britain plays a part."

Monnet and Schuman, however, don't see it that way. They oppose linking the pool with the Council of Europe because they believe the latter is too vague and ineffectual. That feel-

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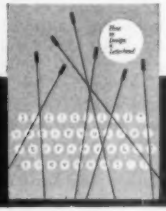

ing is supported by the decision to make Luxembourg, rather than Strasbourg, the seat of the High Authority.

British steelmen think association with the pool—whatever the formal government link—will be just like their prewar dealings with the Continental steel cartel, with which they were linked by treaty but not by membership. They seem unafraid of the pool's competition, hope to gain from its curb on German dumping practices. Their main worry is the pool's possibly stronger bargaining power for scrap, and European or African iron ore.

• **U.S. Role**—Finally, inevitably, Schumania's future depends on U.S. policy. On both sides of the Atlantic, officials warn that Washington will have to keep an active, energetic interest in the pool—make the Germans realize that the U.S. isn't about to pull out of Europe, reassure the nervous French, use strong influence to steer the High Authority away from restrictive cartelism or stifling bureaucracy.

Financing will be needed from the U.S., too. While there's no money now earmarked for the pool—Washington wants to see how it "shapes up"—the Mutual Security Agency has wide latitude to help it out. Congress specifically enjoined MSA to encourage and strengthen organizations looking toward European unity.

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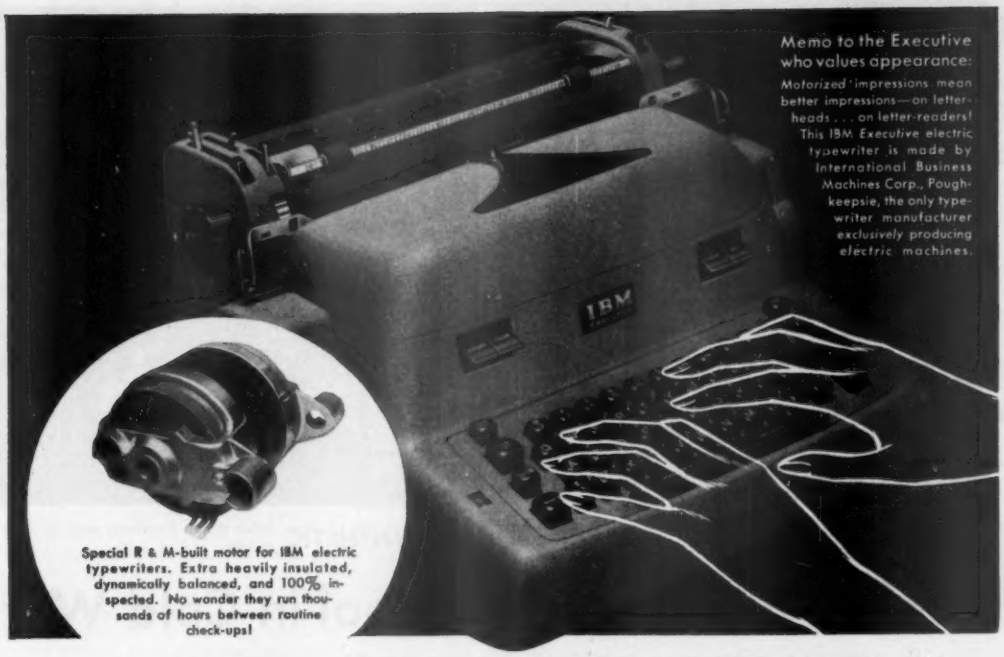
HICOG for Germany

Walter J. Donnelly, a 57-year-old career diplomat, arrived in West Germany last weekend to take over the post of U.S. High Commissioner from John McCloy. Before moving to Bonn, Donnelly was U.S. High Commissioner in Austria; before that he held down top diplomatic posts including the U.S. embassies in Costa Rica and Venezuela. As soon as the West German peace contract is ratified, he'll be our first Ambassador to West Germany.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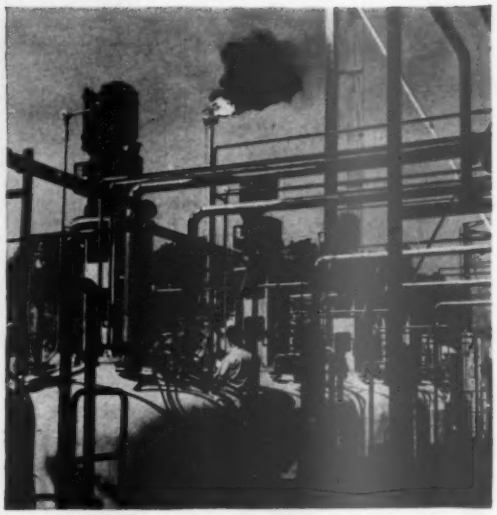

U.S. SYNTHETIC holds steady. Producers want U.S. to stabilize market before . . .

Rubber Becomes New Tool in Cold War

Once, the economics of rubber was determined by supply and demand—the production and price policies of the world rubber cartel balanced against the purchasing power of the big rubber users. Today, the matter has been thrown into the arena of foreign policy. There are even those who feel that rubber's price can tip the scales for or against communism in beleaguered Southeast Asia.

A subcommittee of the International Rubber Study Group, meeting this week in London, is saying just that. And unless Southeast Asia rubber producers can maintain reasonable stability in plantation employment and earnings, the entire area could go to communism by default.

• **Price Slump**—Behind the dire prediction is this fact: The price of natural rubber, principal breadwinner of Malaya, Indonesia, and some smaller nations, has tumbled from a post-Korea high of nearly 90¢ a lb. to a shade under 30¢. Meanwhile the price of man-made rubber, pegged by its producer, the U.S. government, stands steady at 23¢ a lb.

U.S. businessmen call that a fairly normal rubber market. But some of the worried Southeast Asians want to revive the cartel idea of restricting output of tree rubber; others propose that the U.S. boost the price of its synthetic to raise the floor under natural.

• **Daily Risk**—The post-Korea commodities boom sent natural rubber prices bouncing merrily upwards from a sickly 18¢ a lb. When the boom flattened, it left critical economic and political problems in Malaya and Indonesia. Malayan production depends on British plantation managers' daily facing the threat of murderous ambush, getting big pay for their risk. The price slump has taken a lot of the fight out of the managers and their employees. Figures tell the story: Against a favorable trade balance of $320-million in the first half of 1951, Malaya is in the hole for $13.5-million for the first six months of 1952.

The same is true for Indonesia, though it doesn't have guerrillas to contend with on the same scale as Malaya.

• **Aggravated**—Supporters of price stabilization at the London meetings say the low price merely means more military expense in fighting communism in Southeast Asia, and fewer dollars for the sterling areas' reserves in London, already critically low.

Natural-rubber men argue further that the slump in tree rubber is aggravated by U.S. policy: partly by growing competition from synthetic rubber, which they believe is sold below economic cost by the U.S. government, and partly by U.S. purchasing policy. Until this year, the government handled all rubber buying, took measures to deflate skyhigh post-Korea prices.

• **Cold Shoulder**—To these arguments, the State Dept. is saying nothing at present. You get the impression, though, that officially Washington doesn't agree that rubber prices are the be-all and end-all in fighting communism. So it's highly unlikely that the U.S. will consider either scheme set forth in London. To be sure, Washington realizes it has left itself open to charges of manipulating the market by its failure to turn synthetic rubber production over to private industry.

Private industry, on the other hand, has plenty to say. John L. Collyer, president of B. F. Goodrich Co., thinks it "inconceivable" that the U.S., which has achieved near national security in rubber, should jeopardize its position by submitting to international control of natural rubber supplies.

• **Shortage**—P. W. Litchfield, chairman of Goodyear Tire & Rubber Co., goes further. He's afraid the world faces an acute shortage of rubber. Demand has doubled in each 10-year period since 1900, now stands at around 2.3-million tons. It will be at least 3-million by 1960. So Litchfield wants to see an expansion of U.S. synthetic production, plus planting of lots of rubber trees in the Western Hemisphere.

These arguments don't cut much ice right now with the natural rubber producers. Even though Washington has removed almost all curbs on rubber use, they see the U.S. continuing to dominate the price by its power over synthetic prices. A recent announcement by Washington that there's to be no cut in synthetic prices "at the present time" is, in London's view, typical of U.S. market management.

Chemical Split-Up

Court holds that agreements between du Pont and Imperial Chemical violate antitrust laws.

Agreements between two of the world's largest chemical firms have been abolished by the U. S. District Court in New York. The court decided the companies were using them to split up world markets.

Last week Judge Sylvester J. Ryan signed the decree which brought the eight-year-old antitrust suit against du Pont and Imperial Chemical Industries, Ltd., of Britain, to a close. Remington Rand and several foreign concerns were also involved, but the two huge chemical companies were the main defendants.

The court held that their long-standing license agreements and their co-ownership of subsidiaries violated the Sherman Antitrust Act. Du Pont was told to get out and look for its own markets abroad. In fact the decree ordered du Pont to make every effort to promote the sale and distribution of its chemical products in the world markets and to report annually to the court on its progress in that direction.

• **Breakdown**—Here are the main provisions of the decree:

• Du Pont and ICI must discontinue their joint interests in Canadian Industries, Ltd., Duperial Brazil and Duperial Argentina.

• Du Pont and ICI must license their U. S. patents to all interested companies at reasonable royalty rates, and must make available technical information they used in practicing the patents. This information will cost the licensee more royalties; and the licensee must promise to keep it secret for 15 years. Probably the most sought after patent will be the one on nylon.

• Improvement patents obtained by du Pont between June, 1950, and June, 1955, are also subject to compulsory licensing.

• The decree specifically prohibits ICI and du Pont from acting in concert to allocate or divide markets. They can't limit nor restrain U. S. exports or imports, can't set quotas to restrict world markets.

• Neither Remington Rand, ICI, nor du Pont can use Companhia Brasileira de Cartuchos as their selling agent as long as Rem-Rand and ICI own a majority of the outstanding stock of CBC.

• **One Up**—Du Pont did win one concession with the insertion in the decree of a provision for reciprocal licensing. This means that if du Pont is to give

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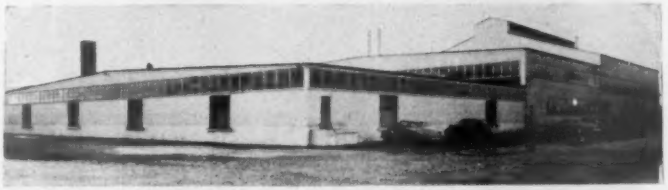

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a patent right, it can require the applicant to give one of its patents in return. Government lawyers opine that it gives du Pont the chance to obtain a lot of information from various companies in exchange for one or two du Pont patents. They point out that du Pont can trade one patent for two.

BUSINESS ABROAD BRIEFS

TV trends: El Mundo Broadcasting Corp. has received the first FCC permit to build a TV station in Puerto Rico. The new station at San Juan will cost an estimated $468,000. . . . The Dominican Republic opened its first transmitting station last week. This makes it the fifth Latin American country to inaugurate television service—the others are Mexico, Argentina, Brazil, and Cuba.

•

Something new in taxes has been instituted in the Philippines. A 20¢ levy has been imposed on every male from 16 to 60 to finance the fight against crop-destroying locusts.

•

London's South Bank, scene of last year's Festival of Britain, is being considered by British European Airways as the site for a helicopter station to serve central London. Two 'copters, a Sikorsky S-51 and a Bristol 171, last week began daily trial flights. If the tests are successful, BEA plans to start service in about two years.

•

LAV, Venezuela's airline has ordered two de Havilland Comet jet transports for its Caracas-New York run. They'll be souped-up versions of the planes now being used by British Overseas Airways Corp. between London and South Africa. Delivery is scheduled for 1955.

•

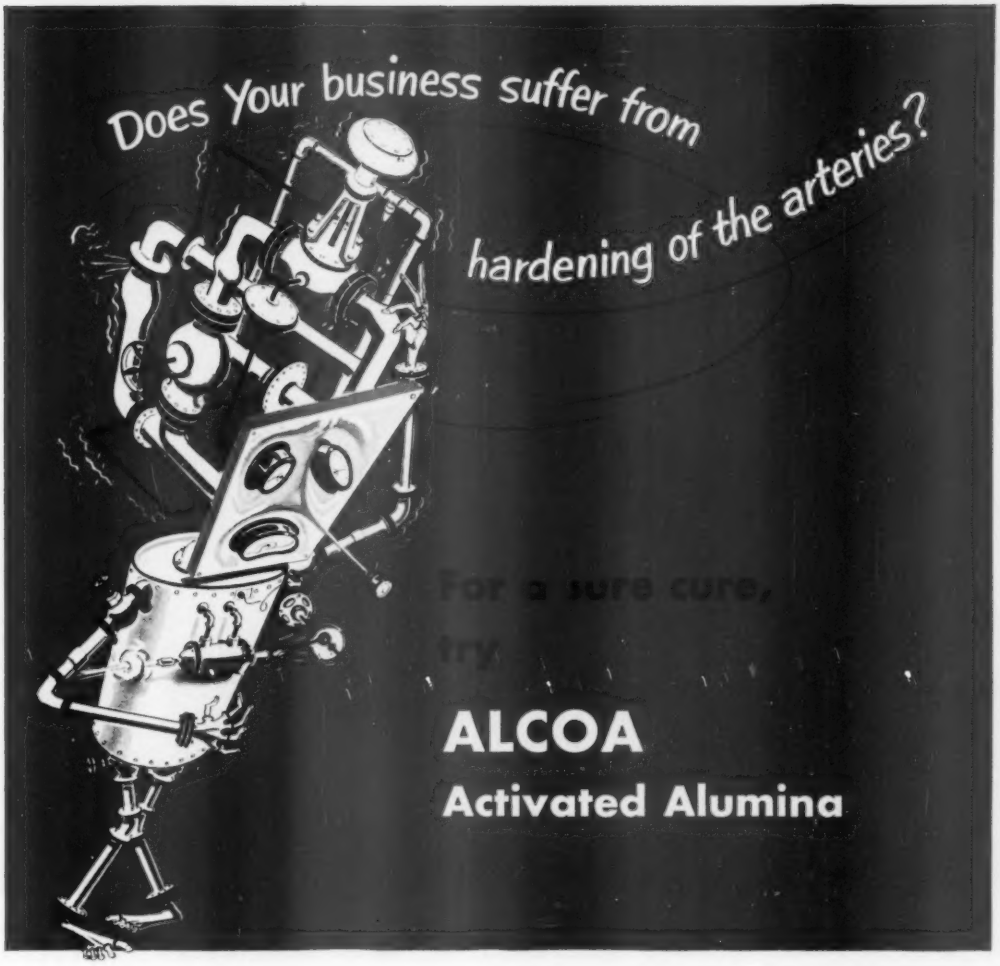
Colombia relaxed export controls on several products last week in an effort to stimulate foreign trade. Controls were entirely eliminated on tobacco, rice, corn, hides, textiles, cement, beer.

•

A shipment of Russian furs worth $1-million is coming to New York through the back door. New York's longshoremen refuse to handle Russian goods, so the furs were unloaded at Montreal last week. They'll come to New York by rail or truck.

•

Ekco Products Co., Chicago manufacturer of housewares, last week became the sole outlet for Sabatier commercial cutlery outside France and its possessions. An agreement was signed with the Societe France-Exporation, which will manufacture knives at Thiers, France, under Ekco supervision.



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INTERNATIONAL OUTLOOK

BUSINESS WEEK
AUGUST 9, 1952

A BUSINESS WEEK SERVICE

These are the dog days, vacation time. There's not much in the headlines but home politics.

But look around the edges of the free world and you'll see a series of crises simmering in the summer heat.

- The Communists seem just one step away from power in Iran.
- North Africa is troubled from the Suez to Morocco.
- Western Europe is plagued by a rash of economic and political problems.
- The uneasy, bloody deadlock continues in Korea.
- A fresh batch of East-West trade troubles is brewing.

Washington is treading water, fingers crossed that none of the crises will boil over before a new Administration is seated.

•

Iranian dictator Mossadegh is bound to start slipping if he doesn't manage to sell some oil soon.

Washington is of two minds about what to do. One group leans to the British policy of standing pat, relying on Turkey and possibly Iraq as Middle East defense anchors. London has just about written Iran off.

Others urge a "realistic" policy on London. That is, allow independents to buy Abadan oil. Unless the industry starts up again, the argument goes, communism will reap the harvest in Iran.

Britain isn't yielding to this line yet. But it may.

•

In Egypt, the military regime of General Mohammed Naguib is far from firmly established. It needs an alliance with a mass party.

A tieup with the corrupt, antiforeign Wafd, Egypt's only mass party now, offers dim hope of orderly government. The alternative is a breakup of the Wafd, a new grouping under Naguib and the smattering of honest Egyptian leaders. So far Naguib hasn't shown the strength for such a maneuver.

London fears an Egyptian financial crisis within the year. That can only benefit the extremists.

•

The British are making a fresh effort to launch a Middle East defense pact—without Egypt, if necessary.

Turkey and Greece, NATO stalwarts, will join; Israel is willing to cooperate. Iraq and Lebanon may help out, despite Egyptian efforts to weld a united Arab front.

•

Further west, in Tunisia, nationalists are successfully blocking French offers of limited home-rule reforms. It's hard to allay the bitterness with so many nationalist leaders in jail or under surveillance.

Observers in Algeria and Morocco report that nationalist fever is rising there, too. They expect trouble in the fall.

•

Britain and France both feel they must trim their rearmament plans. Even so, no one is sure that this alone can straighten out their balance of payments difficulties.

Paris has threatened to veto the European army scheme—keystone of our European defense blueprint—if France doesn't get $400-million more in aid from the U.S. (in the form of offshore purchases by the Pentagon).

Otherwise, Frenchmen fear their military establishment won't be able to match German arms capacity.

•

West Germany is balky, jockeying for position in the councils of the West. Bonn hints that it will turn thumbs down on the army scheme and the peace contract if France doesn't give up its strong voice in the Saar.

Talks on the Saar's future are going on now in Paris—with dimming hopes for a settlement that will leave everybody happy. It may be that the U. S. will have to intervene.

The Saar issue casts a pall over the Schuman Plan (page 106), raises doubts over the future of European unity.

•

The truce talks in Korea remain stalemated over the prisoner issue.

Some observers have faint hopes that the stepped-up United Nations bombing campaign, announced this week, might pound some sense into enemy heads.

Meantime, the Communist military buildup continues. And it can't very well be stopped by bombing when so many men and supplies are cached in Manchuria.

•

East-West trade troubles are worrying Washington again.

Last week Japan wrung some concessions from us on trading with Communist China. Henceforth, the Japanese will follow the NATO embargo list—rather than the stricter U. S. list.

But Tokyo is pressing for even more liberal trade with Mao Tse-tung. And Washington is disturbed by reports that several smaller European nations are quietly trying to band together to boost trade with the Soviet bloc—in defiance of the NATO bans.

•

Juan Peron is headed for trouble in Argentina. He's been sacrificing agriculture to help industry and urban workers for two years or more. Result: dwindling farm exports and foreign exchange, less food to eat at home.

Now he's trying an about-face, plans to give the farmers a better break. That may make it tough on organized city labor. And now Eva Peron isn't around to woo the workers into line.

Washington bets that Peron will have to turn to the army to make his policy stick. But that might not save him. Several key members of the old military clique are reported fed up with peronist policy.

•

Foreign traders, our allies abroad, and plenty of U. S. businessmen have their eyes on the White House. Next week President Truman is slated to act on the Tariff Commission's recommendation for a duty hike on Swiss watches.

An increase in the tariff on watches and movements would give a hefty push to U. S. protectionism.

Administration trade experts claim that tariffs can be raised on anything if they're raised on watches. They don't buy the argument that the domestic industry is essential to defense.

At midweek, no one was sure what the President would do. He threw out a recommendation for a boost on garlic duties recently (BW-Jul.26 '52,p121). But that's hardly a precedent.

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REGIONS

FLORIDA'S INTERIOR counties are getting a good share of industrial growth.

Florida: Diversifying Its

Florida's two leading industries—tourism ($880-million) and agriculture ($500-million)—both have seasonal ups and downs. There's a local saying: "In winter, the Florida cracker eats steak; in summer, he lives on grits and fish." But now, if the cracker eats grits and fish, it's a matter of taste rather than financial necessity.

Florida is leveling its economic hills and valleys in three ways:

- Promoting tourism in the summer, formerly a dead season.
- Encouraging year-round industry.
- Welcoming increasing numbers of retired people from other states.

Of these, the state has made its greatest short-range gain by popularizing a summer resort season. Over the long pull, though, Florida feels shaky about depending too heavily on tourist trade.

• **Two Floridas**—Tourism is a fringe business, geographically if not economically. The tourist visits resorts along Florida's 1,200-mi. coast and leaves his dollars there. If he sees the interior of the state at all, he thinks of it as a vast and uninteresting wasteland with a few oases of citrus ridges and cattle rangeland.

Nontourist Florida, though, is the state's most promising frontierland. Among the sandy wastes, the slimy mucklands, the cutover forests, and the shell heaps, Florida is finding its year-round security.

• **Resort Business**—More tourists are getting Florida suntans this summer than ever before, now that promotion drives are taking hold. Except in the Palm Beach area, most of the glamorous hotels are open this summer, and wintertime night spots are crowded. Merchants who used to shutter their shops all summer are keeping busy.

At the end of July, tourist attendance in the state was running 10% to 30% ahead of the 1951 summer—an alltime record for the season.

This is all well enough, say Floridians, but they ask what would happen

BRAHMAN STOCK shows up in Florida's 2-million beef cattle. Steers from other states are shipped there, too, for winter feeding.

ncome Sources as It Grows

to a resort-dependent state in hard times. Some bankers already are warning that tourist services are vastly overextended, that some land values are inflated, and that credit has been far too easy, with low down-payments, resultant pyramiding of mortgages and loans.

• **More Eggs, More Baskets**—Florida banks want to see the state's eggs put in a variety of baskets. They were hurt in the crash of the land boom of the '20s, and in a series of tourist slumps since then. So they're enthusastic about the diversification of the state's economy.

Results are showing up this summer. Before World War II, there was a gap of 25% between winter business and summer business in Florida. Last year the gap narrowed to 12%, and this year it is expected to fall to less than 10%. That's no more swing than lots of states have.

• **No Waste**—In much the same way, the gap between the earning capacity of Florida's gold coast and the interior "wasteland" is being closed by the state's agricultural and industrial growth (map). Worthless-looking land is yielding richly.

Dredges and draglines with fanciful names such as "The Bigger Digger" and "Tillie the Toiler" crawl like prehistoric monsters into sandy wastes. In 1950 they dug out $68-million worth of raw materials; they now supply 79% of the nation's phosphate needs and much of its demand for rare earth metals. Under the microscope and the spectrometer, the fine black dust that irked sunbathers on Florida's beaches turned out to be rare minerals.

An example of Florida's new lure to miners is the operation of Humphrey Gold Co. Humphrey has opened plants in Jacksonville and Starke, where it produces metals highly rated for enamels and frits, for welding-rod coatings, for pigments, for jet-engines and atomic energy work. And government geologists report they have discovered aluminum ores. Industrial uranium and titanium are other possibilities.

• **Farming**—Florida today is chock-full of such ways in which apparently worthless land and resources have come to life.

The slimy mucklands have been drained and turned into farm lands of amazing productiveness—from which, so the stories go, a $10,000-an-acre profit can be had with good timing and a little luck. On one muck field near Orlando, growers this spring produced—before the northern season—350 crates of sweet corn per acre on 3,300 rich acres.

Currently, a system of dikes is being built through the south-central section of Florida to keep out salt water and open up vast new fields. More and more winter produce will go to the market, adding to Florida agricultural income, which is already three times what it was a decade ago.

The rich muck fields have started something: Northern groups farm

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Okeechobee area land in the fall and winter, New England land in the spring and summer.

• **Ranching**—Much the same thing is happening in another booming Florida industry: livestock (picture, page 119). The first cattle in this country ranged in Florida. Ponce de Leon brought them in, back about 1521. But for centuries the Florida cattle were scrawny critters no cattleman would brag about.

There were two reasons: disease-bearing ticks abounded, and fattening grasses didn't.

It took years, but ticks were finally eradicated, along with a lot of infested cattle and deer that some deep-Florida "wool hats" had fought for years to protect—sometimes with shotguns. A rough-feeding tick-resistant Brahman stock was imported. Cutover pinelands were cleared and planted with clover and grass.

Herds grew fatter and bigger. Last year, nearly 2-million beef cattle ranged Florida ranches.

Texas and Midwestern ranchers are coming in. They had always worried about wintering over their cattle—particularly since feed prices started soaring. After a little figuring, they bought heavily into Florida pinelands. Now, ranches as big as 100,000 acres are winter feeding grounds for out-of-state stock. The freight, ranchers say, costs less than winter feed.

Florida has already made its mark on the livestock industry. It has found that citrus byproducts, discarded before, will fatten stock. And it has so improved the Brahman strain that recently a Florida ranch shipped, by air, better Brahmans to their India homeland to improve the parent stock.

• **Citrus Fruit**—The citrus industry is an "iffy" factor in Florida today. During the war, with demands sky high and planting cheap due to federal tax concessions, citrus interests went hog-wild in planting. State experts warned against it, and were ignored.

For years, it looked as if the experts were wrong. Everybody with citrus made lots of money. Then, last year, the overproduction began to be felt. Prices broke. Rough times continued this year. With heavier crops ahead, they are likely to continue for some time.

Concentrate plants with an expanding market are taking up part of the surplus. But they aren't expected to wipe it out unless some profitable way is soon found to ship concentrates abroad.

• **Pulpwood**—Northern spruce began running low, so Florida pine forests have become the heart of the state's fastest-growing industry: pulp and paper. Plants valued at $200-million or more now dot North Florida's rural

The man in the pin stripe suit once wore overalls...

In the good old U. S. A., we pay off to the fellow who has what it takes. Getting to the top of the ladder more often than not is a matter of starting at the bottom. Sure, there's plenty of competition, but nobody is barred.

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That's the U. S. A. It's chock-full of opportunity for the fellow who knows what he wants and goes after it. It's a land where great merchants once clerked behind counters . . . where bank messengers can become bank presidents . . . where railroad presidents once walked the tracks or punched telegraph keys . . . *where the man in the pin-stripe suit once wore overalls.*

Those stripes are *service* stripes, if you want to look at it that way.

• • •

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WILLIAM S. KNUDSEN
One-time President, General Motors Corporation

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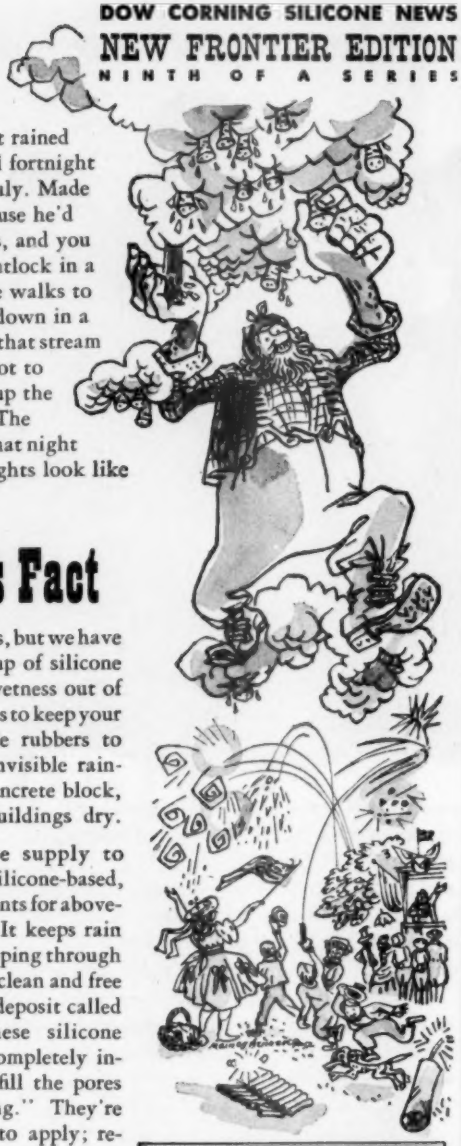
Tall Tale



They tell of the time it rained cats and dogs for a full fortnight before the Fourth of July. Made Paul Bunyan boil because he'd just invented fireworks, and you couldn't even fire a flintlock in a deluge like that. So he walks to where the rain comes down in a solid stream. Swam up that stream like a salmon 'til he got to the top, and plugged up the holes in the clouds. The fireworks Paul set off that night made the Northern Lights look like a firefly's ghost.

to Fabulous Fact

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This and many other fabulous facts are described in our new publication, "What's A Silicone?" We'll be glad to send you a copy. Simply address your request to Dow Corning Corporation, Department E-20, Midland, Mich.

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countryside; facilities to cost $100-million are under way, or projected.

• **Manufacturing**—Lehigh Portland Cement Co., looking around for cheap calcareous raw materials, found it could make cement from coquina shells that are spread over coastal Florida. A $14-million plant rose in rural Flagler County.

Dependable water supplies lured other industries. So did an available—and relatively cheap—labor supply. A variety of other reasons, publicized by Florida's alert Industrial Development Commission (second only to Texas' high-talking, high-spending commission), brought in other plants.

Altogether, the number of manufacturing firms in the state doubled in seven years. In 1951, companies spent or authorized $300-million for plants or expansions in Florida; in the first four months of this year the figure was $72-million. For industrial states, these aren't spectacular figures; for Florida, they are.

So Floridians brag about their new industrialization—and some resent it, fearful of the effect of smokestacks and plant wastes on tourism.

• **Still an Infant**—The fact is, Florida hasn't a manufacturing industry to speak of yet, although it has a potential. There are only 2,800 plants, employing 66,000 at $128-million a year, and producing goods with a $350-million valuation. Of that, the food industry accounts for one-fourth of the total.

Tomorrow, it might be different. There is a notable influx of small, light, diversified industry. Electronics, particularly. New Floridians are moving in at a rate of 100 a week, many with the skills and money for a small shop.

For instance, a needle-trades industry is building up in Miami. It's already a $50-million business that supports two nationally admired fashion shows and employs 3,730 workers. There's a high regard for the garment industry. Smokestackless, it's considered about the least noticeable industry of all.

• **More People**—Florida's rapid population growth is also helping stabilize its economy. Many of the newcomers are retiring on white-collar pensions. The money comes in steadily, year round. According to a survey by a South Florida bank, pensioners have incomes running around $250 to $350 a month. Also, the survey disclosed, most of those with pension income have "nest-eggs" for the purchase of homes (they've sold out up North) and for other purchases.

The rising population also means more construction of homes; more retail trade; more business generally—all adding up to more regular income spread out over the year.

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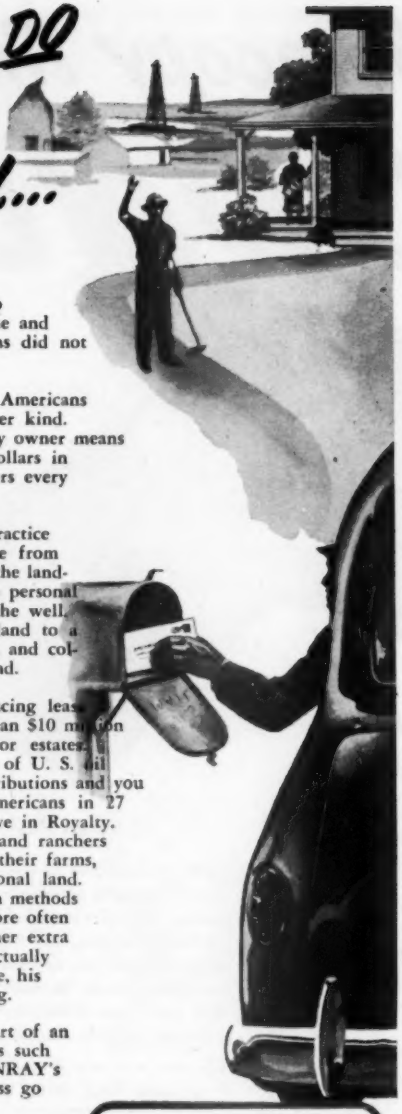

George Washington refused to be King of America because he and most other early-day Americans did not believe in royalty.

Today, tens of thousands of Americans *do* believe in royalty of another kind. Royalty to the modern property owner means *money*. In fact, millions of dollars in royalties are paid to landholders every year by oil companies alone.

It is the almost universal oil practice that one-eighth of the revenue from producing oil wells be paid to the landowner, even though he has no personal investment in the drilling of the well. The owner simply leases his land to a company for drilling purposes, and collects handsomely *if* oil is found.

In 1951 SUNRAY paid producing lease royalties amounting to more than $10 million to more than 7,500 persons or estates. Multiply this by the hundreds of U. S. oil companies making similar distributions and you get an impressive total of Americans in 27 oil producing states who believe in Royalty. Most of this went to farmers and ranchers who used the cash to improve their farms, buy new equipment or additional land. Modern drilling and production methods do not ruin the farm land. More often oil royalty brings the landowner extra revenue that enables him to actually improve his agricultural acreage, his home and his standard of living.

SUNRAY is proud to be a part of an economic system that promotes such progressive practices—for SUNRAY's progress and America's progress go hand in hand.

As a result of SUNRAY's active lease acquisition program the company acquired 557,434 net domestic oil prospect acres in 1951 as compared to 253,637 net acres the previous year, holding a total of more than 1.6-million acres at the present time. SUNRAY is also active in oil provinces of Canada.

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Parking Only

Pittsburgh garagemen fight to keep gas-pumps out of city-owned parking garages. A court will decide.

At least one piece of Pittsburgh's vast redevelopment plan (BW—Jun.21 '52,p170) isn't going to be finished until the courts have wound up a legal fight that involves some of the biggest wheels in the city.

The battle is between private garage operators and the Pittsburgh Parking Authority. The issue is whether gas and oil, car washing, and other services may be sold at parking garages erected by the authority. Legislation setting up the authority says flatly that they cannot. But the authority, which plans to lease the garages, insists that the lessor isn't bound by the restriction.

A judge in the Allegheny County Common Pleas Court ruled against the authority in the first round of a suit filed by private operators. The case will be heard by the full court in September. If the decision is confirmed, the authority insists it will take the test to the Supreme Court, or back to the legislature, if necessary.

• **A Vision**—Parking legislation was brought to life by R. K. Mellon, head of Pittsburgh's redevelopment plan. Specifically, he envisioned a huge underground garage topped by a park in the scrubby block between the 40-story Mellon-U. S. Steel building and the 30-story Alcoa headquarters, in the heart of the Golden Triangle.

When the parking authority bill reached the Pennsylvania legislature, parking garage operators had the vote to beat it. Their price to go along was low: forbid the authority to condemn existing garages or to sell anything but parking service. The bill passed that way.

• **Justified**—The parking-garage operators weren't just being obstructionists. They raised no objection to the new garage. But they pointed out that the authority has inherent advantages that give it a big edge over the private operators. The garagemen pay taxes while the authority doesn't. They pay going rates for their money; the authority sold revenue bonds for 3.5%, gets city parking meter receipts. Operators buy land where they can, at full market prices. The authority can condemn land in the finest possible locations.

Moreover, two major private operators do a good business close by the city's largest hotel—which happens to be right across the street from the authority's proposed Mellon Square garage. This business is about the finest

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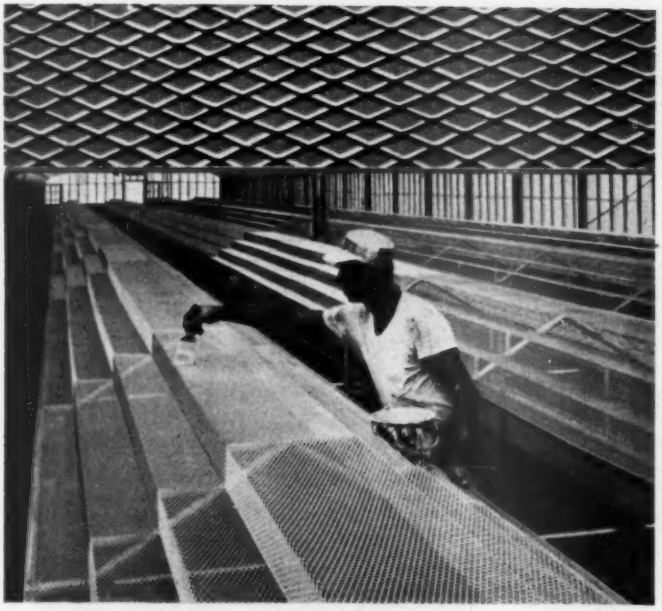

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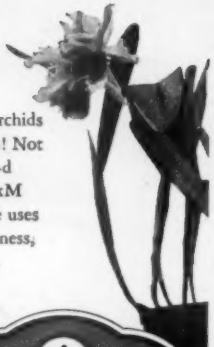

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a garage operator can get. He's almost sure to sell a tank of gas to the overnight transient—maybe oil, grease, and wash his car as well—at absolutely no increase in overhead. It is this kind of trade that the existing garages nearby stand to lose.

• **Doesn't Pay**—Private operators also argue that service facilities don't make sense for the city garages. More than half of the 25,000 parking spaces the authority wants to supply in downtown Pittsburgh are for short-term parking. The authority's principal job downtown, everybody agrees, is to accommodate the in-and-outer, not the man who drives to work.

The operators insist that it is uneconomic to maintain service facilities for the in-and-outer. Since he is not going to be there very long, the most you are likely to sell him is gas. When you start figuring lease charges, taxes, social security, unemployment, workmen's compensation, and insurance, operators say you find you have to pump a lot of gas to break even. At a 6¢ gross profit per gallon, you'd have to sell more than 100,000 gallons a year to pay two attendants.

• **Pro and Con**—One of the most intriguing elements in this public-private ownership tussle for the Pittsburgh parking market is the lineup of big names behind it.

On the one side, of course, there are the Mellons—who aren't accustomed to losing tussles around Pittsburgh. Aside from prestige, a lot of their real estate is involved: The family contributed $4-million to buy the proposed garage property, which was then donated for the project.

Allied with the Mellons is Mayor David Lawrence, a vital figure in the delicate political balance without which R. K. Mellon couldn't possibly have put over the tremendous Pittsburgh redevelopment.

Counsel for the parking authority is a director of the biggest non-Mellon bank in town.

In the operator's camp are two important Pittsburgh names: Joseph Dilworth, president of Pittsburgh Parking Garages, and Leon Falk, chairman of Midtown Motors. Both companies were parties to litigation which halted installation of service facilities in two authority garages now under way.

• **Won't Budge**—Where does all this leave the Mellon Square parking garage? Demolition work has begun but not actual construction. Morrison-Knudsen, the Idaho construction company, has an option to lease the plot and build the 950-car underground garage. It testified, though, that it will not be interested unless it can sell gas, oil, and accessories, and make repairs. It won't budge until there is a court ruling.

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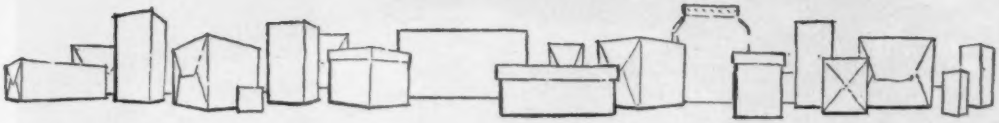

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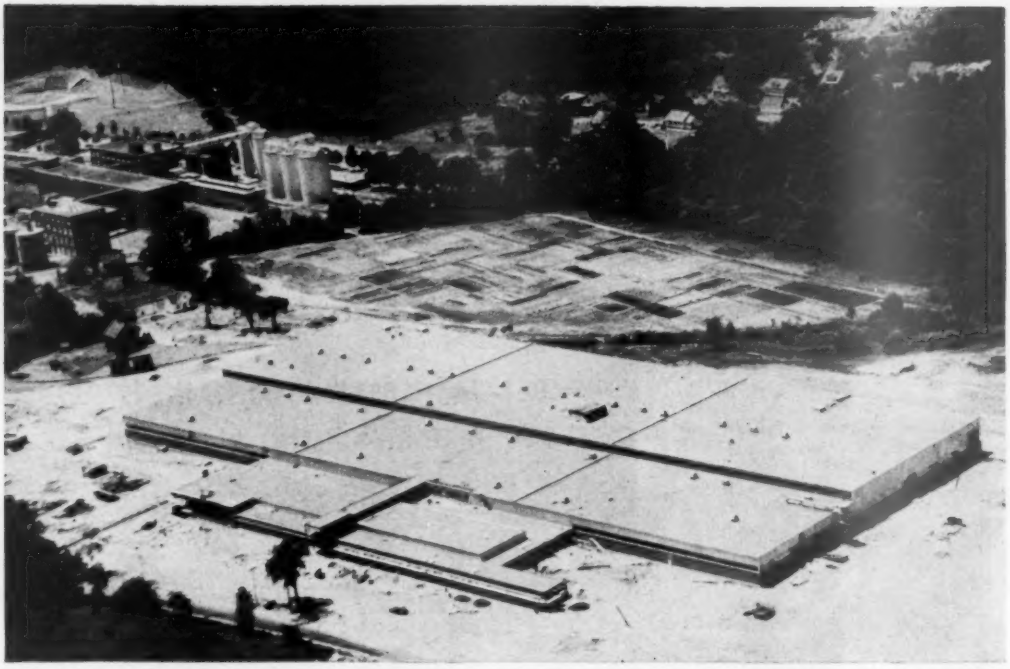

NEW $6-MILLION PLANT of Norton Co. at Worcester goes into production next fall. Company considered moving to Midwest but...

New England Labor Wins Out

Norton could have saved on freight rates by going west, closer to its market, but it felt output would suffer.

Worcester, Mass., has a new answer to the people who are ready to write off New England as an industrial region. Norton Co., a leading maker of grinding machines and grinding wheels, is tooling up a $6-million plant there that will double its machine output. Yet Norton's chief market is in the Midwest.

Norton Co. and its 5,800 employees at the main plant have deep roots in Worcester, where the company was founded in 1885. And the company is more than ordinarily concerned with the welfare of its employees and of the community. Nevertheless, a cold-blooded decision had to be made in the winter of 1950-51: Should Norton sink another $6-million in Worcester or build a branch plant nearer to its Midwest markets?

• **Cash Advantage**—The mathematics worked out the same way as the emotional leanings. A management consultant reported that freight savings would be more than offset by added management costs—duplication of the accounting, traffic, and shipping jobs.

Milton P. Higgins (cover), president of Norton, had this conclusion checked by the company's own people. The inside survey figured freight savings at not enough to make a westward move worthwhile, for several reasons:

• Salesmen report that if a Midwest customer is sold on a Norton grinding machine he's not likely to balk at the extra freight cost from Worcester.

• Opening a Midwest branch plant would make it harder to carry out the company's traditional policy of close supervision.

• Most important, labor is more available and more productive in Worcester than elsewhere.

• **Human Factor**—Management was tickled that head and heart both pointed to expansion at Worcester. Executives had dreaded the thought of having either to uproot or abandon any of the 5,800 workers at Worcester (1,500 of them in the machine division that would be directly affected).

Of these workers, 75% or more have been with the company between 10 and 25 years, and 652 employees have served 25 years or longer. So the human factor stood high in management's thinking—though, as Vice-President Wallace T. Montague says, "I don't know just how you're going to put it in dollars and cents."

Norton thinks, though, there is a dollars-and-cents value on Worcester labor. For one thing, there's no big defense expansion to cut into the supply; that counts when a company is talking new plant. Also, productivity is higher than average for the industry. Finally, availability of labor in Worcester is a big asset when the company hits a period of expansion.

• **Proof**—Norton has just had this lesson driven home. Using average external grinding machine shipments in 1945-47 as a base of 100, the industry as a whole shipped at the rate of 178.2 in 1951; Norton's rate was 315. In the first quarter of 1952, industry shipments ran at 281.9, Norton's at 527.9; estimated second-quarter shipments were 320 for the industry, 550.4 for Norton.

Statistics weren't so favorable for

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Norton before Korea. In 1949, the company was shipping 52.2 grinding machines for 70.2 shipped by the industry as a whole; in 1950, the index was 77 for Norton, 83.6 for the whole industry. But when Norton needed to speed production, the manpower was there. Higgins is proud that men who had been laid off in the doldrums gave up their subsequent jobs for a chance to return.

• **A Pot of Beer**—In the beginning, Norton Co. had no choice about putting down its roots in Worcester—that's where the seed was planted. It happened pretty much by accident.

Until 1885, the Norton name was attached only to a pottery in Worcester. One day in 1873, Sven Pulson bet his fellow potters the price of the morning's growler of beer that he could take emery powder and clay, mix it and shape it and fire it like pottery, and come out with a grinding wheel. He won his bet on the third try, with the help of his brother-in-law, John Jeppson, another potter.

• **Perseverance**—The Norton pottery firm wasn't interested in making abrasive grinding wheels, and Pulson went on to other jobs (a grandson now works for Norton Co.). But Jeppson stuck with the grinding-wheel idea. Finally he took it to Milton Prince Higgins, grandfather of the current Norton president.

The senior Higgins was director of the mechanic-training shop at what is now Worcester Polytechnic Institute.

He and six others bought the grinding-wheel rights from the Norton pottery for $10,000, raised another $10,000 for a plant, and formed the Norton Emery Wheel Co. That $20,000 was the only outside money ever put in the company, which now has more than $80-million in assets; all the rest has come from earnings.

Higgins was named president and Jeppson, superintendent of plant. Jeppson's son, George N., is now chairman of the board, this year marking his 60th anniversary with the company.

• **Growth**—Norton made its name in abrasives and grinding wheels, but its grinding machine business dates back to 1900. In that year, Charles H. Norton (no relation to the potter) offered Higgins plans for a machine to grind away metal instead of shaving it in a lathe. His own employers, Brown & Sharpe, had turned the idea down. Higgins bought it.

Today, Norton Co. has 1,500 employees in the grinding machine division, 4,300 others at Worcester making grinding wheels and abrasives, 1,000 more at mines and smelters in Arkansas and Canada, 2,600 at the subsidiary Behr-Manning sandpaper plant in Troy, N. Y., 100 at an oilstone plant in New Hampshire, and 2,600 in abrasive plants

overseas: Britain, France, Italy, Germany, Australia, and South Africa.

• **President**—As company president, Higgins spends much of his time traveling. He goes abroad every year. While in this country, he takes to the road with Norton salesmen, visiting customers with plants employing as few as 12 men. He thinks this fence-mending helps in keeping domestic sales of machines and wheels at around $100-million a year.

Higgins had nine years of sales work during his grooming to move into his grandfather's desk as president. After his sales experience, the company moved him to Canada to run the Chippawa (Ont.) electric furnace plants. After two years of that, he was back in Worcester to move steadily up through the ranks to the presidency in 1946.

The president is a brisk, somewhat boyishly modest man, a 1928 graduate of Harvard.

• **Research Stressed**—Higgins hammers hard at research. He and his aides believe you have to keep new products coming. Norton engineers produced a boron carbide abrasive trade-named Norbide, which they call the hardest material aside from diamonds (Norton also makes diamond grinding wheels). And more recently they came up with fused stabilized Zirconia, a refractory material for temperatures up to 4,700F. The company spends more than $1-million a year on technical research.

The company also has developed business research to a high degree. That's the technique of digging up facts to guide executive decisions, such as the one to expand in Worcester.

• **150,000 Varieties**—One trouble with selling grinding wheels is that there are too many kinds of them. Norton's output ranges through 150,000 sizes, shapes, and consistencies, from 6-ft. pulpstones down to ⅛-in. mounted points. It keeps 25,000 varieties in stock on 20 mi. of shelves. For some types, the company is its own best customer; it uses $100,000 worth each month to finish other wheels.

Standardization is regarded as impossible, with so many specially designed machines in use. But the industry's association figures that in 40 years the number of types has been reduced, by all manufacturers, from 750,000 to 250,000.

• **Sales**—To sell a line of 150,000 types of grinding wheel, as well as machine tools, Norton has a team of 125 salesmen organized by territories, plus about 300 domestic distributors.

Salesmen, nearly all graduate engineers, are specially trained in a "school of grinding," and distributors' salesmen also get short courses. The company's own sales force accounts for about 55% of wheel sales.

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Two Parties and Two Good Candidates

In Adlai Stevenson, the Democrats picked their best possible candidate for President. By the same token, Dwight Eisenhower is up against a formidable opponent, and the people, who must decide between the two, will not have an easy time doing so.

Stevenson, the man, is cut out of our finest traditions. As nearly an aristocrat as an American can be, Stevenson also possesses a common touch; that was borne out in Illinois four years ago, when he won the governorship by a plurality of 572,000, although Truman took the state by only 34,000.

Rare, too, in office-seekers is Stevenson's humility, expressed, as was Eisenhower's, in his reluctance to the very last to seek his party's nomination. This, as we have seen in the case of Eisenhower, does not antagonize, but attracts people. Moreover, Stevenson has earned a reputation for being an honest and clean, as well as able, administrator.

Stevenson made it clear even before his nomination, in his speech welcoming the Democratic convention to Chicago, that he was not disposed to gloss over such issues as corruption.

"Where we have erred," he said then, "let there be no denial; where we have wronged the public trust, let there be no excuses."

After these words, it will be difficult, particularly in view of Stevenson's effort to clean up Republican corruption in Springfield, to pin on him responsibility for Democratic corruption in Washington.

On other domestic issues—for example, government spending and Taft-Hartley—Stevenson is likewise an unorthodox Democrat. Of Taft-Hartley he has said that it contains beneficial features, and, in contradiction to the Democratic platform, seeks its modification, not repeal. He has castigated excessive government spending; in his administration of Illinois he has produced two biennial budget surpluses, and during the Presidential campaign can be expected to preach something resembling economy. Even on civil rights, where his party's official position as well as that of its titular head is uncompromising, Stevenson assumes a moderate stance that will not alienate either the Northern liberals or Southern conservatives. The addition of Alabama's Senator Sparkman to the ticket reflected Stevenson's anxiety, after the North had had its way on platform, to placate the South, and to meet the challenge there offered by Eisenhower.

On foreign policy, too, Stevenson's position, as he himself points out, is close to Eisenhower's. This, as almost everyone has remarked, is a good thing for the country, since it insures continuation of our general course in international affairs regardless of who wins in November. It ought to assuage the fear of our allies that we might suddenly renounce our world commitments, and it should deter our enemies from engaging in new adventures.

Despite all this evidence that on certain basic issues Stevenson and Eisenhower are not far apart, the Democratic candidate is, nevertheless, a New and Fair Dealer. He got his start in public life under Roosevelt, first as a lawyer in the Agricultural Adjustment Administration and later as an assistant to Frank Knox in the Navy Department and Stettinius and Byrnes at State. An earnest of his devotion to his party is that he was willing to run for Governor of Illinois at a time when victory appeared impossible, and that now, against his own will and judgment, he has assumed the mantle of Democratic standard-bearer. As he promised in his acceptance speech at Chicago, he will campaign essentially on the Roosevelt-Truman record, which he considers "imperishable." And he has frankly declared that the perpetuation of a single party in power is not a genuine issue.

Whatever the result this November, the candidacies of Stevenson and Eisenhower demonstrate dramatically, and at a time of unprecedented challenge, that our American political system is still capable of producing fine leaders. What matters in the coming months, as Governor Stevenson has said, "is not just winning this election, but how it is won, how well we can take advantage of this great quadrennial opportunity to debate issues sensibly and soberly."

Who Won?

Not every prizefight is ended with a knockout blow. Many of them go the limit and the outcome is determined by a decision of the judges and referee.

In the recent steel strike neither management nor labor was able to score a knockout. Claims about who won have been made by both participants and by many onlookers. Our own view is that management won.

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(1) The companies could see coming over the horizon as the strike started a clear prospect of less-than-full-capacity operations and a weaker market for steel products. The strike drained the supply lines and renewed the customers' appetite for steel. As a result, a strong market all through the remainder of 1952 and well into 1953 is certain.

(2) Individual members of the labor union lost so much pay that it will take each of them a couple of years to get caught up. Some, of course, nearing retirement age will never have a chance to retrieve that loss.

We feel that on balance the companies fared better than the union. And, for that reason, they should feel some satisfaction in resisting efforts from Washington to push them into an earlier settlement that would have been more costly to them.

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